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Universities resist UGC cuts plan

by Ngalo Crequer

More than a dozen vice-chancellors are meeting in London today to discuss the deepening financial crisis in the universities. All universities have been asked to tell the University Grants Committee by the end of the month how they will be able to respond to cuts in income of anything between 12 and 18 per cent over the next four years.

One university—Keele—has already indicated that it will refuse to submit plans for a 5 per cent cut, and in a letter to heads of schools, the vice-chancellor of London University, Lord Annan, says the Government appears to want to force the university to make staff redundant.

The UGC has asked universities to provide by the end of this month three different financial projections, and what their estimates are of student numbers for the quadrennium 1980-81 to 1983-84.

The three hypotheses, based on a provisional base line figure for 1979-80, represent a 2 per cent growth

over four years, level funding, or a reduction of 5 per cent.

The universities have also been told that from next year overseas students must pay the full economic cost of their tuition and the income normally received to pay for this will eventually be taken out of the recurrent grant. Thus the recurrent income for overseas students will be reduced by 40 per cent in 1980-81, by 40 per cent in 1981-82 and 20 per cent in 1982-83. Income from overseas students already on course is protected.

It has been estimated that in real terms, taking into account the reductions in respect of overseas students, a 2 per cent growth in recurrent income would in fact be a cut of 11.3 per cent, by 1983/4, level funding would mean a cut of 13.1 and minus 5 per cent would mean a cut of 17.4.

Dr David Harrison, vice-chancellor of Keele, said: "It is not practicable for us to go on this track. We are going to argue that we are at the steady state size and that is the right size for us. We are

a highly residential university, probably the most residential in the country and we want to fill our space. We are arguing out of that position that by implication the third projection of 5 per cent is impracticable."

Other universities are just as gloomy and some face massive deficits. At Strathclyde, although all figures are provisional, it has been estimated that by July, 1980, the deficit will be in the region of £800,000 to £1,000,000. All departments have been asked to make economies.

In May the University of Exeter budgeted for a deficit of £166,000 but it now looks as though the eventual figure will be nearer £466,000 because of the likely cut in real terms.

Lord Annan has written to the heads of school at the University of London to say that the financial future looks "appalling."

He has written: "Unless some major revision of the allocation takes place, Court grants to Schools will be totally inadequate. I cannot escape the conclusion that the

Government intends to compel Schools plan to make redundancies."

He has also raised the spectre of a row between the universities and the polytechnics over the burden of paying for the reduction in income in respect of overseas students.

He says: "I understand that while universities are being compelled by these financial restraints to charge overseas students 'economic fees', no such compulsion is being exercised upon polytechnics. . . . This is outrageous. He plans to raise this with the Government."

At Edinburgh the local Association of University Teachers will ask Court to urge the university not to comply with the UGC request for planning information.

Dr John Burnett, principal and vice-chancellor, thinks that non-cooperation could only tie the UGC's hands in their handling of the universities' case but thinks instead that they should be given all possible support in contesting damaging aspects of Government policy.

Poly site runs into City snags

David Jobbins

Government plans to restrict the public sector's share of investment may wreck a City of London polytechnic scheme to seek private finance for its £26m new site at the Trade Wharf in London's dockland.

The polytechnic, which is faced with an accommodation crisis, plans to run out in five years' time, it has been negotiating with a leading financial institution to raise money for the project on a "lease back" basis.

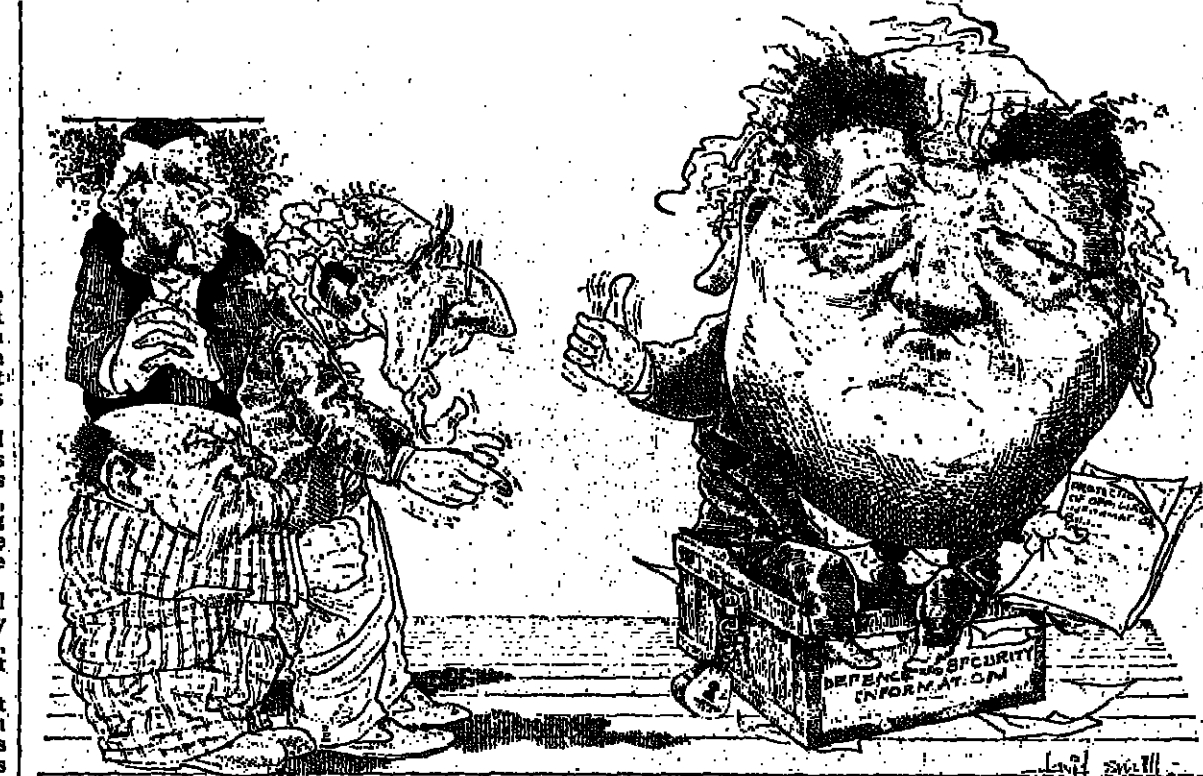
We have had extremely helpful assistance from one or two City institutions—one in particular," Gerald Hine, the assistant vice-chancellor of the polytechnic, said.

But last month the Government blocked a consultative Green Paper inviting comments on its plans to replace its existing controls borrowing with a mechanism designed to make sure that the use of local authority capital funding is consistent with national planning.

Now the City institutions are less keen on the polytechnic's proposals. At least until they see the precise effect of legislation arising from the consultation, expected later this month.

Mr Hine explained that until a lease back exercise appeared in need of specific Department of Education approval, within the building programme, the Green Paper, however, proposes that local authorities get decisions for spending approval for five main heads including location, within which they would be able to determine their own criteria. If the proposals were rejected, lease back projects would require Government approval.

Mr Hine was not prepared to disclose the name of the institution which had been most interested in the arrangement.



by Peter David

Senior historians and social scientists are becoming increasingly alarmed by the Government's Protection of Official Information Bill, which has its second reading next week in the House of Lords. They say that if it became law, the Bill would pose a grave threat to academic research and publication.

The Bill, which is designed to replace the notorious Section 2 of the Official Secrets Act, has already been roundly condemned by the press for restricting the freedom of journalists. But Professor M. R. D. Foot, editor of the *Guardian*, said the Bill was "weak" and it would also be a "tremendous handicap for scholars."

Information Bill threat to research

He added: "So far as I can see the object of this Bill is to enable civil servants to misbehave without being called to account. If this Bill is going to be passed by a mad Parliament, we may just as well shut up shop and go away to a country that is free."

The Bill proposes making it an offence to disclose any information which falls into a new "protected" category.

Mr Laurie Taylor, professor of sociology at York University, said he was particularly worried about the inclusion of a "law and order" clause. "The possibility of independent research into the area of the prisons has probably gone forever," he said.

Professor E. P. Thompson, author of *The Making of the English Working Class*, said he could not believe a British Parliament could pass such a "frightening" Bill. Mr Donald Watt, professor of international history at the London School of Economics, said he was most worried by the attitude that lay behind the Bill. "It seems to be a recurrence of the 'not in front of the children' syndrome," he said.

Five hour week lecturers highlighted in report

Vast differences in the work-load of polytechnic lecturers—with some staff teaching less than five hours a week—are highlighted in a report this week from the Local Government Audit Service.

In his report for 1978/79, the chief inspector of audit discloses that at one college, which he does not name, class contact ranged from under five to 26 hours.

staff but who had under five hours class contact each week," he wrote. "Their time was recorded as being absorbed within the following categories of work—committee work, course administration, industrial visits, material preparation, research and other unspecified work."

The range varied between 12.8 hours and 20.0 hours with an average of 16.6 hours for art and design courses; 10.7 and 17.7 hours with an average of 13.7 in faculties

which are broadly workshop or laboratory-based; and 10.3 and 19.7 hours with an average of 13.6 in faculties more related to classroom teaching methods.

A partial explanation for the poor performance in classroom-based courses is suggested, too, by the serious effects of the rundown in the numbers of teacher-training students. The figures were called from the Pooling Committee monitoring reports.

Spinal in 1976

Catholic colleges fight cuts in intake

by Paul McGill

The future of Northern Ireland's teacher education colleges has been thrown into doubt by another sharp reduction in intakes proposed by the Department of Education.

The department has told the local advisory committee on the supply and training of teachers that the colleges should take in only 550 new students next September, plus 31 commercial students and 40 student teachers for music and drama.

Intakes have already been sharply reduced. Only 871 trainees were admitted this year compared with more than 2,000 in the early 1970s. While the advisory committee may persuade the Northern Ireland education minister, Lord Elton, to be slightly more generous, he is not likely to move far from his 550 figure.

A paper issued by the department says that the total teaching force is being reduced from 19,325 to 18,075 over the next five years. It argues that intakes of only 450 are needed to maintain teacher numbers at the reduced levels but concedes that there are restraints on teacher mobility, that the flow of re-entrants to the profession may not continue and that there are good reasons not to want the flow of newly qualified teachers to fall too low.

The reduction in the teaching

force is justified in the paper by falling school rolls and the department's claims that with the loss of 1,250 teachers, staffing ratios will improve slightly over the next few years.

Teacher unions and educational bodies accept that decisions are being taken on an economic rather than educational grounds. This fact is strengthened by the revelation that more than a third of all primary children in Northern Ireland are being taught in classes of 31 or more pupils.

Speculation has increased about what is to happen to the seven colleges engaged in teacher education and Lord Elton added to this by announcing that he had asked the Chilvers Committee to produce an interim report on teacher education by next May.

The committee—the Higher Education Review Group—was set up under the chairmanship of Sir Henry Chilvers to consider higher and advanced further education in Northern Ireland in the 1980s and 1990s.

Too many colleges are now chasing too few students and even the decision to stop Northern Ireland students from going to teacher education courses in Britain has not solved the problem.

The three general teacher education colleges Stranmillis, St Mary's and St Joseph's are the focus of the proposed decline. In 1974,

they had a combined intake of 811. If the department's proposals are planned, they will have only 295 new students in 1980.

Worst hit are the two small Roman Catholic colleges, St Mary's and St Joseph's, which have been engaged in 145 students between them. As this reduced intake works its way through they will be down to less than 500 students each.

For some time a merger of these two colleges, which are divided on the basis of sex, has looked inevitable. But with further cuts something more drastic must now be on the cards.

One alternative is integration with Stranmillis, but this is something the Catholic colleges will resist. St Mary's argues for an expanded role for itself and its male counterpart. It argues that Catholic schools account for 45 per cent of pupils but that the Catholic colleges have only 26.6 per cent of student teachers. It suggests that a more realistic figure would be 37.6 per cent.

Taking students from the other colleges and giving them to the three general colleges raises the big question of the future of NUU, Queen's University could lose all its student teachers without any great harm, but at NUU education constitutes 33 per cent of student numbers. Clearly, then, Chilvers cannot deal with teacher education without also discussing the unthinkable in British education—the closure of a university.

New University of Ulster and others.

It accuses the Department of appearing to betray the three colleges "by undermining and weakening their structures while at the same time maintaining and improving teacher education in the New University of Ulster and the Ulster College".

The college goes on to say that teacher education has become the mainstay of NUU providing about one-third of its students and that the incursions of the university and polytechnic into teacher training have led to "an irresponsible over-production of graduates".

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Fears for role of teacher training

by John O'Leary

University staff engaged on post-graduate teacher training courses are worried about their present role and their future, preliminary research being carried out at Loughborough University has shown.

The project, which is headed by Professor Gerald Bernbaum, will provide the most comprehensive study yet of teacher education in universities, covering staff and students at all 29 institutions where Post Graduate Certificate in Education courses exist. Every student starting a university PGCE course has been contacted and, with 5,000 questionnaires already returned, researchers anticipate an unprecedented response rate of more than 90 per cent.

Students will be followed through the year's course and interviewed again during their first two years in schools. The 1,000 staff involved with PGCE courses in universities will also be asked about their workload, experience, ideology, teaching practices. A pilot study has already been carried out.

Professor Bernbaum told a meeting at a conference organized by the Society for Research in Higher Education that the study would not threaten anyone. The first conclusions might be reached in a year's time when the study research has been completed.

Mr Ken Reid, the project's director, said that initial responses had shown the variety of course types, select methods and priorities, as well as underlying the autonomy of colleges.

Local wealth determines job prospects

by Patricia Santinelli

Local economic factors, not academic attainments, determine young people's abilities to obtain employment, a Youthaid report on a transition from school to work life revealed this week.

The report, which is the second of an investigation commissioned by the EEC, and is to be published early next year, says it had to draw on the experiences of 250 school leavers being studied in Barrow upon Tweed, Newcastle upon Tyne and Hackney/Islington.

In Newcastle, where during 1978 on average one week out of six was spent in unemployment, the report found that the local economy was in a state of decline and that the local authorities were unable to provide enough jobs for the young unemployed.

In one of the two Newcastle schools participating in the study, eight of the 24 girls who tried to get work on leaving school were unable to find jobs. The report also found that the local economy was in a state of decline and that the local authorities were unable to provide enough jobs for the young unemployed.

In some cases, special measures have allowed boys to fulfil their ambition to get craft apprenticeships in local traditional trades, but this has not been the case for all. However, by doing so, it has also put these young people in direct line for redundancy.

Tronically, because of the outlook in the city and the region, one girl school leaver who has passed from a work experience programme on to Newcastle education department organized community services for the young unemployed, has been offered a job.

Geography centre for Sheffield Poly

A new centre for geography and environmental study opens at Sheffield City Polytechnic today.

Sponsored by the polytechnic, the Schools Council and Sheffield Education Authority, it will provide local, regional and national resources for the use of teachers and students. The centre will also offer in-service courses for teachers.

Chelsea College gets a Royal helping hand

by Ngalo Crequer

Her Majesty the Queen Mother has intervened in the battle by Chelsea College to acquire an urgently needed historic London site and to prevent it being sold for commercial use.

The Department of the Environment is soon to decide whether the Chelsea bid for the premises of the former College of St Mark and St John, near King's Road, is acceptable or whether it should go to public auction. The situation has an added urgency because legislation could soon be introduced to remove the obligation of public bodies to offer sites to other educational institutions before putting them on the open market. This would put many sites out of the financial reach of educational bodies.

The Queen Mother, the Chancellor of the University of London has responded to requests from the Chelsea students, the Friends of Chelsea and others. The president of the students union has received a reply to say that, at Her Majesty's bidding, the situation is being investigated and it is hoped that a solution will be found.

Earlier this year there was a public outcry. It looked as if the college was going to be gobbled up. The Greater London Council accepted the college's offer of £1.8m for the eight-acre site but then decided to reconsider the offer after two higher bids had been received from the British United Provident Association (BUPA) and Romulus Construction.

Before the matter got to the GLC the Royal Borough of Kensington and Chelsea refused to give any body but the college planning permission to develop it.

The site, originally owned by the Church Commissioners, was compulsorily purchased by the GLC several years ago, to make way for a motorway. Eventually, that plan was dropped and the buildings,

which include accommodation for about 100 students, remained standing.

Both BUPA and Romulus appealed against the refusal of planning permission and a public inquiry was held. The results are not known but a decision about the site is now in the hands of Mr Michael Heseltine, the Secretary of State for the Environment.

In June the GLC decided to accept the college bid and to support its representation. As this meant they were accepting a bid lower than the others, this decision must be ratified by the DoE. Meanwhile the college has been rallying support. Their ranks include the Bishop of London and Lord Chalfont, president of the Chelsea Society.

If Mr Heseltine decides against the college he will do so in opposition to his colleagues in both the Department of Education and Science and the Treasury.

It was decided to press for the site when it became obvious a year ago that earlier plans to re-site Chelsea College in Tooting, at a cost of about £20m, were no longer possible.

The college desperately needs extra space. Existing space is 25 per cent below University Grants Committee norms and leases on a number of current annexes are also shortly due to expire. The college would be able to pay for the new premises by selling the site in Springfield, Tooting, which it cannot now afford to develop.

Dr David Ingram, the college principal said: "It seems as though this is being treated as a test case for a new philosophy on planning. What we are saying is that you should not change the rules in the middle of the game. The acquisition of the site represents a unique and irreplaceable opportunity to satisfy the urgent needs of Chelsea College."

Science budget limits 'crippling' space research

by Robin McKie
Science Correspondent

Space research in Europe—particularly at universities—has been crippled because of drastic limitations imposed on the science budget of the European Space Agency. This is the main conclusion of a report of the standing committee on space science which was presented to the European Science Foundation annual meeting in Strasbourg last week.

The report points out that space research in Europe originally had a very successful phase. But when ESA was formed out of existing space organisations in 1972, funds for scientific research were drastically reduced and confined to less than 15 per cent of the agency's total budget.

This was done to provide more cash for developing ESA's applications programme—telecommunications, satellites, rocket launchers, Spacelab and other projects of potential commercial value.

"However, it is now apparent that this was wrong because the savings were not more than about 10 per cent of the whole space budget while the reductions, at the same time, seriously crippled space science in Europe," the committee warned.

Existing funding means ESA's satellite launches are now so infrequent that European institutes have only

about two chances every 10 years to participate in an agency project. "This is utterly inadequate, because the programme is so small that new talent is not likely to be attracted," the report states.

"Furthermore, the university groups are suffering more than the large research institutes from increased difficulties of access to space. Space science must, however, remain able to strengthen and support research in the universities."

The committee pointed out that universities offered the best surroundings for interdisciplinary space research and were most likely to attract the next generation of scientists and new ideas. To ensure this, there must be more funding for space research which would ensure a high multiplication factor in its use for many fields of science.

The report also warns that financial restrictions were forcing ESA to collaborate with American space programmes. However, agency contributions were often insufficient to secure an appreciable influence on the research programme by the European partners.

"Spacelab is an example of a project which has been developed in Europe with considerable funds, but since it is only one element of an entire space transportation system, Europe finds itself being unable to influence its long-range development," the report adds.

EEC Ministers disagree on mobility

Common Market education ministers have still not succeeded in agreeing a united approach for free student mobility.

A meeting planned for earlier this month was cancelled. This was the latest development in the continuing row which led to the indefinite postponement of a meeting which had been due to take place next week in Brussels.

The 1978 meeting failed because of the French and Danish delegations' opposition to the proposed agreement, which would have allowed students to study in other Member States for up to one year.

There are no signs of a change of heart by the Danes, although officials are trying to resolve the problem. Hopes in Brussels are that the recent general election in Denmark may create a new climate. Danish sources in London also pointed out that the Prime Minister's opposition to the agreement was not being extended and emphasising that as much could be achieved by bilateral agreements.



Professor Philip Reynolds (left), the acting vice-chancellor of Lancaster University, and Mr Trevor Phillips, the president of the National Union of Students, during a meeting last week with protesting students.

Students plan a national strike

by John O'Leary

Students are to mount a national strike on November 28 as the latest weapon in a campaign which has already seen occupations at about 70 institutions in protest at high fees for overseas students and cuts in education spending.

Opposition to the new fees has poured into the Department of Education and Science from universities, trade unions, student unions, and even the Church of England.

In the latest example, published today, Mr Len Murray, the General Secretary of the Trade Union Congress, told Mr Mark Carlisle, the Secretary of State for Education, that the new fees were morally unjustifiable. "We urge you to reconsider your policies and turn back

from a step which will cause irreversible damage to the standards and future development of higher education and to Britain's political, economic and international standing," his letter concludes.

Unprecedented co-operation between students and some university administrations was evident during last week's nationally co-ordinated protest. At Lancaster University the acting vice-chancellor, Professor Philip Reynolds, joined Mr Trevor Phillips, the president of the National Union of Students, and local student leaders at a press conference in the occupied senate chamber.

However, the atmosphere of collaboration was absent at the University of North London, where police were called to disperse an occupation and three students were

cautioned, and at Sheffield University, where the authorities twice made court applications for repossession of the administration block. The Sheffield sit-in lasted almost a week and survived one court appearance, a writ being refused because the university failed to attach proof of ownership of the buildings.

Five occupations were continuing earlier this week—at the Polytechnic of Central London, at Bristol, Leeds and Leicester Polytechnics, and at Kent University, with others being contemplated elsewhere. More than 20,000 students were said to have taken part in sit-ins last week and about 120 student unions took some action, making the campaign the biggest mounted by NUS for at least two years.

London learning threatened

by Patricia Santinelli

Thousands of young people and adults working but not living in inner London are to be denied the opportunity to study in the capital if a clause in the current Education Bill becomes law.

The clause as it stands would effectively repeal "free trade" between Greater London education authorities—that is, between the outer London boroughs themselves and between them and the ILGA, the London Education Authority, all that is being achieved is a recipe for mediocrity not excellence," Mr Mick Farley, assistant secretary, further education at NATFHE, said.

There are also real fears that the clause could seriously undermine ILGA's regional functions. Free trade has guaranteed cooperation in the provision of central educational programmes such as the work done for adult deaf people. The City Literacy Institute's Centre for the Deaf acted as a regional centre with financial support coming from outside inner London, drawing deaf people from the whole region.

Moreover, there are minority interests which can best be provided centrally, as in music and the arts and crafts, where inner London provides centres of excellence such as the specialist Colleges of Printing and Furniture, which are unique to London.

High salaries not important in career choice

by Peter David

Students regard job-satisfaction and intellectual stimulation as much more important than material rewards when choosing careers, according to a survey by Market and Opinion Research International (MORI).

In a sample of more than 1,000 undergraduates 49 per cent mentioned intellectual challenge as the most important consideration in career choice, and 34 per cent mentioned having jobs which allowed "full and constructive" use of their time.

Other factors considered important included the opportunity to be creative and original (31 per cent); foreign travel (24 per cent) and interesting colleagues (23 per cent). A high starting salary was considered important by 18 per cent of respondents.

Six per cent regarded status and prestige as important, and even fewer—3 per cent—cared about a good pension scheme. An academic environment was considered important by 7 per cent of the respondents, and 11 per cent were concerned that their careers should have a sense of public service.

The expected mean salary on graduation was £3,600. These students are down by 8 per cent compared with the same time last year, according to statistics released by the Universities' Central Council on Admissions.

But as UCCA points out, overseas candidates tend historically to apply later than home students and it is too early to judge if the reduction in numbers will continue.

By October 15 fewer than one fifth of the expected total number of candidates had applied. Applications by women are up by 2 per cent and by 1 per cent by United Kingdom students. Total figures are up compared with 29,922 the same time last year.

So far, popular subjects are computing, Oriental, Asian and African languages, theology, electrical engineering and mathematics. These less popular subjects are the combined biological sciences, home, hotel and institutional management, accountancy, civil engineering and business management sciences.

CNA group plans return to Teesside

A Council for National Academic Awards team is to revisit Teesside Polytechnic early next month to check on what progress has been made since its traumatic quinquennial review last year.

Polytechnic authorities hope the return may result in a lifting of the CNA's threat to withdraw recognition of its degree courses next summer unless "substantial improvements" were made.

The CNA made a preliminary visit earlier this year—following a request from the polytechnic—to find out if a return visit could be useful. Cleveland County Council set aside £1m extra over two years to help with the polytechnic's resource problem.

Stagnation spreads to medical research

by Robin McKie

The staff stagnation which is affecting universities is spreading to research councils, according to the Medical Research Council's annual report published this week.

The report points out that the high recruitment levels of the 1960s, combined with the 1975 regulations offering greater employment security, have resulted in a disproportionate number of 35 to 45-year-old scientists being employed at the council's research units. Most of these researchers will remain with the MRC until retirement at 65.

"Over the next 20 years or so the average age of the council's scientific staff is therefore likely to rise. In periods of little or no growth in the budget there may well be a reduction in the council's ability to recruit young scientists, with far-reaching effects on the support of biomedical research in future," the report says.

The problem is aggravated because universities are facing similar problems—staff stagnation there

has reduced staff turnover in the MRC since a natural outlet into university employment has been blocked.

The MRC also warns that its budget could be seriously eroded if pay settlements for staff significantly exceed the sum provided in the Government cash limits. "The possibility makes it difficult to be confident about the prospect of a period of sustained real growth in the immediate future and could result in a substantial cut in the council's programme," the report adds.

The council is already facing difficulties in balancing numbers of good postgraduate students against the general shortage of suitable vacancies for postdoctoral research scientists.

"Any significant increase in the number of studentships would have to be financed by a saving on research grants—the main means of support for postdoctoral scientists. The council has therefore decided not to increase the annual number of research studentship awards," the report says.



Students from Middlesex Polytechnic relaxing in a converted factory in Enfield, which has been turned into a students' and community centre called Scope. For a fee of 10p members of the public are allowed to use the bar, advice centre or meeting rooms. The project, which is organized by the polytechnic's students' union, will eventually include a drama group, an arts project, a community newspaper, and a scheme for looking after latchkey children.

Micro-electronics chair for Bristol University

A privately funded chair of micro-electronics is to be set up at Bristol University by the Imperial Group. The £100,000 endowment—over five years—is the first of its kind by private industry and is to be supplemented by a further £40,000 for equipment and furniture from the University Grants Committee.

This has been arranged to allow the university to establish close links with micro-electronics companies which are to be set up in the area—including Inmos, Plessey and Marconi.

Bristol University is contacting several possible candidates and it is expected that an appointment will be made next month. A micro-electronics unit is due to be inaugurated at the university campus in the area of the city's electrical engineering and physics departments.

"The overall goal of the unit will be to develop the speed of development of the subject, which will enable us to maintain a high level of research and development in the field of micro-electronics," says Professor Sir John Harrison, vice-chancellor.

Getting on with civil servants, by former DES minister

by John O'Leary

Junior Ministers only receive the full cooperation of their civil servants, says an initiative educational policy in the House of Commons. The backing of their senior colleagues. This was the conclusion reached by one member of the last Labour administration after four years in office.

Mrs Margaret Beckett, who as Under-Secretary at the Department of Education and Science, recalls only one, unspecified, example of apparent interference by permanent officials. Standing policy and the pressing of logistical problems made persistence and experience vital qualities if changes were to be introduced. Delivering the annual William Walker Lecture to the British Educational Association, Mrs Beckett said she had not found the widespread suspicion of civil servants to be justified at the DES. Far from taking too active a part in formulating policy, some officials

had "a positive horror" about doing so, and could rather be criticised for inertia. "It is possible for a junior Minister to make policy forays of some sort to press emphasis here and there, but I think a Minister who consistently pushed policy which had not been cleared by the Secretary of State would find himself in trouble," she said.

Mrs Beckett made a call for more continuity in departmental appointments to provide the experience and expertise necessary to tackle complex areas of government. A Minister who had no previous contact with his area of responsibility would be incapable of influencing policy for several months, she said, unless he introduced because of the Government's election mandate.

Guidelines promised on school curricula

The "great debate" on education, launched by the Labour Government in 1974, culminated this week in an announcement that the Education and Science report says that some authorities lack a clear idea of what the "core elements" of a school education should be.

Reporting on a survey of curriculum practices in every local education authority, a Department of Education and Science report says that some authorities lack a clear idea of what the "core elements" of a school education should be.

Lecturer with drink problem fights dismissal

by Willis Pickard

A lecturer at Edinburgh University who was dismissed for neglecting his work while an alcoholic but who was totally abstinent by the time of his dismissal is to demand reinstatement from an industrial tribunal.

Mr Hector Blair, who until March was a lecturer in the Russian department, will claim at the tribunal on November 28 and 29 that the university, in common with most employers, lacks a policy on alcoholism. He says he had been an alcoholic for 10 years but that he had been sober since March 1978.

The Edinburgh branch of the Association of University Teachers who appealed to the university staff committee on Mr Blair's behalf have submitted a paper to the university arguing for a coherent policy on alcoholism. In particular, the university will have to explain to the tribunal why it persisted with dismissal when for a term in the spring of this year—Mr Blair, by then not drinking, carried out his duties to the satisfaction of Professor Dennis Ward, his department head.

As the Edinburgh AUT put it: "By dismissing Mr Blair, the university is sending a message that the most needed support the university is virtually ensuring his return to alcoholism."

North American News

Labs warned on nuclear waste

from Clive Cookson

WASHINGTON

Universities and medical centres across America are asking their researchers to cut back drastically on the use of radioactive material. The problem is that there is nowhere to dispose of the low-level radioactive wastes produced by their experiments.

Until last month the United States had three commercial facilities that accepted such wastes, which include liquids containing small quantities of radioactive tracers such as tritium, carbon 14 and iodine 125, as well as solid garbage contaminated with radioactive chemicals, for example used laboratory equipment, lab coats and gloves, and dead experimental animals.

But in October two of the sites, in Washington State and Nevada, were closed down by the state governments on the grounds that the sites were not properly packaged. The third facility, in

South Carolina, remains open for solid waste only and has been forbidden to accept consignments that would otherwise have gone to Nevada or Washington.

Despite pleas from federal officials, universities and hospitals, as well as research and medical associations, the governors seem determined to stick to their hard line until the Federal Government comes up with a national plan for disposing of low-level radioactive wastes and enforces safety rules for transporting them. The three states say they are fed up with being the nuclear garbage cans of America. In particular they are furious that the north-eastern states, which produce most of the country's radioactive wastes, take no responsibility for disposing of them.

The governors' attitudes were undoubtedly hardened by anti-nuclear feeling from the Three Mile Island accident, although of course there is no real connexion between nuclear power and the use of radioisotopes in biomedical research, and

ironically their ban is not affecting the nuclear power industry, which has its own disposal sites, as badly as medical research.

So far most universities have been able to continue all biomedical research, by urging experimentalists to cut down use of radioactive materials to a minimum and by using their ingenuity to find places to store the waste temporarily until permanent disposal is possible. But these makeshift arrangements can only work for two or three months, the state officials say. To date only a handful of research teams generating particularly large amounts of radioactive wastes have had to stop work completely.

If the crisis has not been solved by next year, thousands of research projects in the chemical and biological sciences may have to be suspended. For example, Stanford University says it alone has 300 projects generating significant quantities of radioactive waste. The university's total annual output fills about 600 55 gallon drums, all with very low levels of radioactivity. Stanford's senior health physician, John Holmes, hopes the output can be cut by a third without seriously affecting research.

However, the United States Government is likely to take emergency action to defuse the crisis before a large part of the nation's medical research has been shut down. One action it could take, if the Nuclear Regulatory Commission declares an emergency, would be to allow its nuclear reservations to accept commercial wastes. In addition some state governors, including California's Jerry Brown, are making plans to establish temporary storage sites.

The long-term solution is for the states to get together with the federal authorities and agree to set up new regional sites where low-level wastes can be disposed of permanently. It will take a bit of political willpower to do so because the disposal of even low-level wastes, which are virtually harmless compared to the high-level wastes produced by nuclear power stations, is a highly charged emotional issue.



The nuclear plant at Three Mile Island, scene of the accident earlier this year which has helped to harden state governors' demands for reduced use of radioactive material in universities.

Focus turns to Quebec's universities

The universities of Quebec have so far been affected remarkably little by the political upheavals in the province since the separatist Parti Québécois Government took power in 1976. But over the next year, during which the referendum will be held over the provincial government's proposal to pull out of Canada, the universities' place in the new order should become clearer.

This year the Government has published two major reports about Quebec's universities and, after a further period of consultation it expects to introduce legislation based on the reports in 1980.

One document is a gigantic study by a Commission d'étude sur les universités, chaired by Pierre Angers of the University of Quebec. The second is a Green Paper proposing that Quebec should have its own scientific research policy.

Last month Education Minister Jacques-Yvan Morin announced that the recommendations produced by the Angers Commission after two years of work would be sent to the Quebec Universities Council, a government advisory group for further comment. Although some observers had expected the Government to introduce legislation this autumn, Mr Morin denied that the findings were in fact being shelved. He said the Government would publish its proposals to reform the university system in the spring.

The Angers panel recommended many changes in the structure of higher education in Quebec and in the relationship between the universities and the Government. One controversial suggestion was to split up the multi-campus University of Quebec: the big Montreal campus would be detached, becoming Quebec's fifth independent French-language university. There are also three English-speaking universities.

The Green Paper, an academic, published last March, contains a long and critical analysis of the way research is conducted in Quebec's universities. In essence, the conclusions are that university research is

fragmented, uncoordinated and inefficient and researchers are completely isolated from industry and from the economic and social needs of Quebec.

Some of the other general themes of the Green Paper, which is entitled *Towards a Scientific Research Policy for Quebec*, are:

- Ottawa has consistently deprived Quebec of its fair share of federal research funds and given English-speaking Ontario more than it deserves.
- Within Quebec, university research is unduly dominated by governmental and industrial research and is so weak.
- The province has two quite separate research networks, one English-speaking and the other French-speaking, which communicate and collaborate very little.
- Quebec needs new government agencies, including a science and technology ministry, to control and coordinate research and to set priorities.

Dr Camille Laurin, the Minister of State for Cultural Development, has primary responsibility for developing Quebec's science policy. He is a hardliner, who was responsible for the province's laws to enforce the use of French. In the eyes of the English-speaking minority, he is the least favourite of all René Lévesque's Cabinet. On the other hand Mr Morin is seen as one of the more sympathetic members of the Parti Québécois.

When Dr Laurin brought up this point at a meeting with university representatives in Montreal, they reacted unanimously that academic teaching and research functions were indissoluble. "Mr Morin clearly understood, but Dr Laurin, taken back by the unanimity of the response, replied that even if on this occasion the Ministry had asked the wrong questions, universities would be called upon to justify themselves one way or another," commented an observer from McGill University.

Mr Morin has consistently reassured the universities that the Government will respect their autonomy. If he were running the Government, he would be all right, but there is always Dr Laurin to worry about.

Thomas Reiser, Professor of English at the French-speaking Laval University in Quebec City, expressed his fears. "Although innocuous enough on the surface, the Green Paper represents the last in a continuing series of measures by the Quebec Government to exert thought control over the Quebec population."

More subtle than the charter of the French language and the broad ban on the use of English, the Green Paper, however, is none the less dangerous, for it seeks to bring even academic inquiry within the purview of government regulation.

North American News

Report attacks US language studies

From our correspondent

WASHINGTON

"Americans' incompetence in foreign languages is nothing short of scandalous, and it is becoming worse," declared the president's Commission on Foreign Languages and International Studies in a hard-hitting report to Mr Carter.

After a year's work, the commission proposed a package of more than 130 recommendations to reverse alarming deficiencies which, according to its chairman James Perkins, "pose threats to America's security and economic viability".

The proposals include several programmes that would give many more American students, teachers and researchers the opportunity to study or work abroad.

The whole package would cost the Federal Government \$180m in the first year. Of that sum, about \$50m would be spent on the most expensive and controversial proposal, that language courses at all levels of education should be directly subsidised by Washington on a per capita basis. For undergraduates these "incentive grants" would be \$40 a year per student, like food or international security and 60 to 70 state or regional centres concentrating on curriculum development and the training or retraining of teachers from all levels of the education system. Most of the centres would be established at colleges and universities and funded by federal grants averaging \$200,000 a year.

Undergraduate education. All undergraduates should be required to take two or three courses in international studies, and to know a foreign language. The Department of Education should give out 200 federal grants a year, worth \$40,000 each, to develop or improve international studies programmes. Fellowships in international studies. About 1,200 fellowships, each worth \$8,000 a year, should be awarded to postgraduate students, and another 535 postdoctoral and professional fellowships, worth \$20,000 a year, awarded to senior researchers and faculty members. All fellowships would be payable at home or abroad.

Advanced research. A few Federal Councils on International Research and Training should be set up with new funds of \$20m a year to finance research projects in international studies and foreign policy. International educational exchanges should be expanded at all levels. The United States international exchanges should be expanded at all levels. The United States international communications agency, which is primarily responsible for exchanges, should have its budget for exchanges increased from \$42m to \$60m immediately and to \$100m by 1985.

other nation on the face of the earth in encouraging foreign languages", declared Mr Simon. (There are indeed few other countries in which students can go right through elementary, secondary and undergraduate education without studying any foreign language.)

However, representative Millicent Fenwick (Republican), who was also on the commission, will be opposing Mr Simon's Bill. Clark Kerr, chairman of the Carnegie Council on Policy Studies in Higher Education (who was not on the commission), was another doubter. He does not believe widespread language study is necessary. "I think that we need it, maybe one per cent of our population with extremely good training in specific languages they are using," he said.

Here are some of the major recommendations affecting higher education. International study centres. A network of between 125 and 1,155 centres for advanced training and research should be created, with 45 to 55 national centres focusing on the major regions of the world, 20 to 30 national centres concentrating on world studies, and 50 to 60 international security and 60 to 70 state or regional centres concentrating on curriculum development and the training or retraining of teachers from all levels of the education system. Most of the centres would be established at colleges and universities and funded by federal grants averaging \$200,000 a year.

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Third edition, published November 1979

HYMAN'S COMPARATIVE VERTEBRATE ANATOMY

edited by Marvalee H Wake

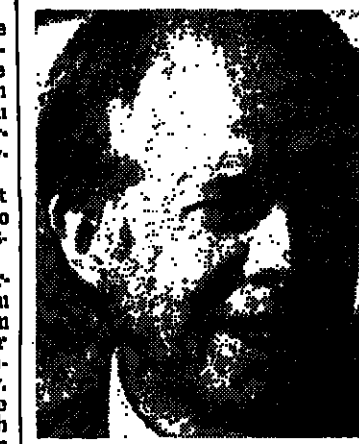
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The earlier editions of the late Libbie Hyman's book were published in 1922 and 1942. She recognized the need to revise it in the late 1960s but was unable to do so herself. At her suggestion workers in several areas of vertebrate morphology have prepared this completely rewritten edition, incorporating new research and concepts in functional morphology and evolution. A great strength of "Hyman's" is the incorporation of extensive dissection instructions with the text of the book, is continued.

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Carter's plan to stimulate productivity



President Carter: wide-ranging package

BRITAIN and the United States stand at the bottom of the international league table of industrial productivity. They had much the lowest rates of improvement during the 1970s (over the first three-quarters of this year American productivity has actually fallen at an annual rate of 2.5 per cent), and a widely perceived—though by nature unquantifiable—decline in the rate of industrial innovation is closely related to the poor performance of both countries.

President Carter decided to tackle the problem early last year by launching a huge "domestic policy review" to come up with new ideas. The exercise took place on a scale that only the American Government can achieve. Twenty-eight federal agencies and 250 Government officials were involved: they consulted hundreds of people from business, unions, universities and public interest groups, and set up scores of committees.

The process reached its climax this month when President Carter announced a wide-ranging package of policy initiatives to encourage innovation. Unfortunately they were rather an anticlimax after all the manpower devoted to the review. The measures seem sensible, but none is really imaginative or innovative.

There is no mention of universities as educational or training institutions, turning out the scientific and technical manpower to support innovation. On the other hand, several of the proposals involve universities as research institutions. For example:

- Funding for joint university-industry research projects will be increased substantially. The first step will be to add \$20 million a year to the small programme which the National Science Foundation started last year to support projects proposed by joint university-industry research teams. The NSF will work with other government agencies, including the Departments of Defence and Energy, the National Aeronautics and Space Administration, and the Environmental Protection Agency, to help them set up similar university-industry cooperative programmes. Total expenditure on this programme is expected to reach \$150 million a year.

- The Government is to set up "generic technology centres" at universities. They will develop and transfer the technologies that underlie several industrial sectors: for example, robotics (automated assembly), tribology (the science of lubricants) and corrosion control and prevention.

- President Carter proposed several steps to strengthen and clear up the United States' chaotic patent system. One important effect will be to allow universities to patent inventions by faculty members doing government-financed research (at present some federal agencies insist on keeping the ownership of such patents, so universities cannot exploit them commercially). A Bill to this effect has already been introduced in Congress.

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Overseas News

Italy acts to curb 'campus tourists'

from Uli Schmitzer

ROME — Italy's 72-year-old Education Minister, Salvatore Valeruti, has stirred up an old hornet's nest by proposing reforms to curtail liberal admission to universities and free choice of faculties.

But this time the hornets did not sting. The 44 rectors of the country's state-run open universities agreed almost unanimously at their assembly in Palermo to back the reintroduction of *numerus clausus* (limited entry) and entry examinations.

The measures are designed to curb chronic campus congestion, suppress the cry that standards have plummeted and stop students from simply becoming "campus tourists".

The minister, acutely aware that his predecessors failed to push through Parliament similar measures, initially has singled out for *numerus clausus* those faculties famous for their overcrowding—like medicine.

Some rectors did not even wait for any legislation to reach Parliament. They shut their gates at once.

The first victims, not unexpectedly, were foreign students. At Perugia University hundreds were turned away when they tried to enrol for language and Italian culture courses. Some could not even sit for the entry examinations introduced last year for foreign students.

Bologna followed suit. Even last year, despite the ministry's protest, we refused to accept foreign enrolments," said chemistry dean Alberto Breccia.

Bologna's pharmacy faculty has 540 students—half of them foreigners. Professor Breccia says thousands of Greeks, Lebanese and Iranian students have invaded engineering and architecture faculties at Bologna and Florence. In Rome 4,000 of the 20,000 medical students are foreigners, most of them from Third World countries.

"Unless we have *numerus clausus*," says Gianfranco Pegli, professor of surgery at Rome University: "We will continue to have enrolments of Italians without any vocational merit and foreigners who were refused by their own universities."

With 150,000 medical students in Italy (the country's mass universities churn out more doctors than any other European country), the lack of staff and lack of supervision, it was no surprise when Bologna's medical faculty issued a statement which bluntly said: "Italian medical faculties today produce doctors which are for the most part unskilled to practice."

Spurred on by the promise of lucrative incomes and an enviable social status, young Italians for years have swamped medical faculties. In Sicily alone this year there are more medical students than doctors.

"Many obtain their degrees without ever having dissected a corpse—they don't know the difference between an artery and a vein because they have never seen either," grumbled one Roman professor.

The clamour for *numerus clausus* followed a year of accusations that open universities have dramatically lowered the standard of Italian education.

In August Professor Bruno Zevi, the eminence grise of Italian architecture, resigned his chair at Rome University saying: "Better a small pension than a big classroom full of donkeys."

He later claimed there was "a tacit agreement between students and professors: the former do not attend classes, the latter don't teach."

Italy now has 17.3 students per 1,000 inhabitants, compared to Britain's 9.3.



One might think that young South Africans soldiering in Namibia (above) were doing so at the cost of their education. But a study in Johannesburg has shown that students who have completed their two-year stint in the defence force fare better in their first year at university than those who have been granted deferment, writes Martin Feinstein.

Professor P. A. J. Marais, head of the Bureau for Higher Education at the Rand Afrikaans University, said 77 students had enrolled at the university this year after two years' military service. In the economics faculty their examination pass rate was 92 per cent and in the arts and

Wanted: 540 academics down under

from Lindsay Wright

WELLINGTON — New Zealand's universities were 540 academics short last year according to the University Grants Committee. The committee intends to ensure that there is some improvement in the staff-student ratio next year. It has told Parliament that one of the major matters to be considered in formulating grants for the coming quinquennium is the number of academic staff required.

"Present grants were calculated on a series of ratio of staff to students being available to afford full-time students which were intended to provide the universities with an overall staff-student ratio of 1:10.18 by 1979. This ratio was not generous by comparison with those in the university systems of most other countries with which ours are usually compared, but it took account of the large first-year classes characteristic of many departments in the New Zealand universities."

"However, student numbers have exceeded those on which the grants were calculated, so that in 1978 the grants had under-provided for academic staff numbers by 210."

The committee said that increasing costs other than salaries and wages have resulted in the universities being unable to afford the staff numbers originally provided for, let alone those needed for extra students. Those shortfalls amounted to a further 330, making a total shortfall of 540.

Germany lifts study time limit rule

by Günther Kloss

The much-disputed rules on the length of study for individual courses will soon be a matter of the past for West Germany's higher education institutions.

The Bundestag, the second chamber of the Federal Parliament, has just approved an amendment to its 1976 higher education Act to that effect.

Although the change will not do away with the idea of a normal length of study, it will eliminate the main direct means of enforcing it—the clauses which state that if a student does not register for his examinations within a certain period of time he will automatically be excluded from the university.

For many years German politicians and administrators considered the *Regelstudienzeit* to be the only means of compelling the universities to revise their courses and curricula.

This aspect of university reform has been largely neglected and is almost certainly one of the chief causes of the overcrowding.

The total number of full-time students grew from 87,000 in the autumn of 1974 to 946,000 in 1978.

but this was higher than the increase in the number of first-year students over the same period (164,000 to 172,000), and part of this is ascribed to the trend to take longer to obtain a first degree. In 1977 it took an undergraduate an average 3.38 years to graduate at a university or college of education.

The introduction of the *Regelstudienzeit* was opposed by students and staff of all political persuasions. They saw it as a serious limitation of their traditional freedom of learning and teaching. In actual fact, the legal existence of *Regelstudienzeit* has hardly made any difference. Few Ministers of Education have enforced it; where they tried, for example, in Baden-Württemberg, they failed. And contrary to expectations few additional places for first-year students have been gained as a result.

For many students the shortage of money to finance their course or the limited duration of their grants has been a more compelling incentive to complete their undergraduate course as quickly as possible.

The prescribed length of study may even have impeded the thorough overhauling of existing

courses, as a result of this alliance between conservative staff who are not only opposed to any interference from outside but also believe there is nothing fundamentally wrong with the traditional unstructured course system, and of progressivist staff who protest against any intrusion by the bureaucracy into their democratic rights.

The Ministers of Higher Education from SPD as well as CDU/LDP Governments have now recognised that the introduction of this limit on the length of study in the universities is rather than a limitation of the content and structure of courses must come before a maximum length of a course.

Unfortunately this does not mean that a substantial course overhaul will ever be achieved in the West German higher education system which is essentially hostile to innovation and which is hampered by close government supervision.

The language of the universities has often been criticized, not least by German industry which has deplored the inordinate length of time it takes a student to obtain a first degree.

Dutch resist 7-year degree pressure

from John Richardson

THE HAGUE — The announcement of the Netherlands government's science budget for 1980-81 has led to a series of government pressure on the universities to reform their antiquated degree structures and forge new links with the less well-endowed higher vocational colleges.

Of 21.9 billion guilders (€5 billion) which will be available in 1980 for all education, including the universities, the Ministry of Education and Science almost six billion guilders is allocated to higher education and research.

In the next four years the national science budget will be cut by 25 per cent, higher than in any other country, says the Education Minister Dr. Arie Falk.

Dr. Falk, a former economics professor at the University of Amsterdam, who is a member of the liberal D66 party, says that the universities will be able to keep the increased number of students by raising their productivity, which he

context of restructuring their degree programmes.

The present system in which the undergraduate takes more than seven years to complete his first degree course has been decried in the face of attacks from successive governments over the past decade by a fiercely independent press which is also the best paid in Europe.

Dr. Falk hopes to witness the introduction of a two-phase structure for Dutch degrees for the beginning of the 1980 academic year. The new structure is loosely modelled on the British system with a first degree lasting four years, followed by one or two years' postgraduate courses for some 40 per cent of the graduates.

The budget keeps up the pressure on the professors by insisting that from January 1 all newly appointed professors will be paid at a rate equivalent to that of a professor in the Netherlands, who is a

colleges, many of which have fewer than 200 students, receives only more favourable treatment in the new budget. It is to receive the million guilders more than in 1979.

Although the increase will largely be taken up by the need to provide for a rapidly increasing student population, there will be a little spare for innovations such as the introduction of students in technical education to 14 subjects.

There is no equivalent in Holland of the British polytechnics and colleges of higher education and the further aspect of the minister's restructuring policy is to make a transition from six to ten years' education to the university courses.

At the moment transfer is possible but only after the four-year vocational course has been successfully completed. His six to ten year degree courses are not possible.

Cuts, swingeing cuts, are certainly on the way but there is confusion about their size and where they will fall . . .



From the moment the General Election swept Mrs Thatcher to power last May, there was only one aspect of the new Tory administration's policy which higher education could be certain about: there would be cuts and lots of them.

In its very first sentence the expenditure White Paper published two weeks ago makes it plain that cuts in public spending are central to the Government's economic strategy and not just regrettable consequences of it. "Public expenditure is at the heart of Britain's present economic difficulties," the White Paper maintains.

The Government believes that only by bringing public borrowing under control can it slow down the growth in the money supply and check inflation. Higher education will have to play its part in the grand design.

Yet seven months after the election and despite a detailed budget in June and the unveiling of an expenditure White Paper for 1980-81, the exact size of higher education's share of the cuts is impossible to compute. To the certain knowledge that cuts are on the way have been added uncertainty and confusion about their size and where they will fall.

One reason for the confusion has been the speed at which the Government has moved. In seven months it has revolutionized the place of overseas students in British higher education. It has made it clear that for the first time since the war university intakes will actually fall from one year to the next.

Government's scrupulously prepared plans for a new body to preside over spending in polytechnics and colleges.

But there are at least two other reasons for the confusion that has gripped the University Grants Committee, vice-chancellors, polytechnic directors and local education authorities: since the Government's announcements began to flow, the fact is that the cuts have spanned two years and not just one; the second, in that the first time the cuts were announced, they were based on the assumption that the Government would be able to raise money by increasing taxes.

"Funny money" is Whitehall's way of calculating the volume of public expenditure without taking into account the fact that the Government will have to raise money by increasing taxes.

BRIEFING

Compiled by Peter David, Ngalo Cragger, John O'Leary, David Jobbins, Robin McKie and Patricia Santinelli

that pay rises and inflation make it more expensive every year to provide the same amount of education.

An example of the effects of "funny money" calculations is that the universities do not yet know how much actual money they are able to spend in the current year, let alone next. Before the General Election Mrs Williams, then Secretary of State, fixed their recurrent grant for the year at £714m, but there was never any real prospect of keeping within that target.

That is because Mrs Williams's £714m was based on two assumptions for this year which have already proved wildly optimistic: that inflation would be in the order of 8 or 9 per cent and pay increases after taking the university teachers' anomaly payment into account—would average 5 per cent.

By the time Sir Geoffrey Howe had prepared his budget in June inflation was already running at over 17 per cent, and university (teachers) were looking for a 30 per cent increase to compensate for the erosion of their salaries since the Leggatt tribunal in 1974.

So the big question for the universities is how much extra money, if any, the Government is going to give them in April to compensate for the real movements in university salaries and costs during the year. And until they find out, the pariahs between the Association of University Teachers and the vice-chancellors can make no real headway.

The absurdity of the universities' financial predicament was spelled out in unusually harsh terms last month by Sir Alec Merrison, chairman of the Government's Vice-Chancellors and Principals.

He told the UGC: "University salaries for both academic and non-teaching staffs have yet to be determined and we have no assurance that the Government will be able to meet any increases. We have no significant source of finance other than Exchequer funds, and in this situation it is impossible for us to negotiate sensibly with our staffs."

In the public sector, too, polytechnic and college lecturers have referred pay claims to the Clegg commission. So far the Government has evaded the question of how far it is prepared to top up the Rate Support Grant to enable local councils to finance any pay awards Clegg recommends.

The Government's reluctance is understandable. Officially there is no incomes policy but the amount the Government pays its own employees will help to set the "going rate" in the next wage round. As soon as there is an announcement in real (not funny) money terms about public spending plans, it will be possible to deduce how much inflation and how much increase in pay the Government is ready to concede.

Under the new system the Department of Education and Science will know by exactly how much the collective estimates of polytechnics and colleges for 1980-81 exceed the amount of money available in the pool. The difference will be shared out to each authority and either cut from the polytechnics' budgets or paid for out of the maintaining authorities' own rates. It is a recipe for swingeing cuts.

The RSG—and for the universities the amount of supplementation in their recurrent grants—are the central pieces of the cuts jigsaw. But even while they are missing, enough pieces are in place to build up a very stark picture for this year and next.

The first piece of the jigsaw came in the June budget, which cut more than £30m from higher education spending this year directly, and an unquantifiable amount indirectly by cutting the RSG by 1979-80 RSG by £360m, about half of which would come out of the education budget.

In October the second piece fell into place with a UGC letter to the universities confirming that there would be no increase in university funding, in real terms, "for a number of years". The letter also revealed that the Government would no longer provide any money for overseas students, who account for 13 per cent of the universities' income. From next year foreign undergraduates would have to pay the full cost of their courses.

And two weeks ago another piece slotted into place when the Government's expenditure White Paper made it clear that expenditure on education next year is likely to be £441m less, in constant prices, next year than in this. The universities' recurrent grant for 1980-81 has not yet been announced, but a cut of £12m in the present year was confirmed.

Higher education's reaction to all three measures has been predictably hostile, but the change in UGC funding arrangements and the phasing out of the foreign student subsidy have generated most alarm.

Although the Government argues that it wants to "stabilize" spending on the universities, the UGC letter in October left the vice-chancellors in a very awkward position.

Limiting the AFE pool in advance is a "very" innovation. In previous years the pool has been open-ended and retrospective. Polytechnics could spend money in the confident knowledge that the cost would fall, not on the local education authority, but on all education authorities who contribute to the pool.

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Countdown to the cuts

JUNE: Sir Geoffrey Howe's budget cuts £500m from the 1979-80 Rate Support Grant. Education's share of the reduction is estimated at about half. The budget also reduces the Department of Education and Science's own budget for that year by £55.5m. £8m is lopped off the university recurrent grant, £7m off student awards, £3m off medical school capital grants and £1.5m which would have set up the new national body for public sector higher education proposed by the Labour government. The grants to the open universities and the voluntary colleges are cut by £500,000 each. Building programmes for polytechnics and colleges are cut by £900,000 and for universities by £400,000. Another £600,000 comes off university spending on computers and equipment. Cuts in the year's science budget are £5m and £6m is saved by raising overseas student fees. A pilot scheme of grants for 16 to 18-year-olds is abandoned, saving £10m. The Social Science Research Council, with £17.5m budget for 1980 students expecting to take higher degrees that their bursaries and studentships have been withdrawn.

AUGUST: The University Grants Committee warns universities to cut their intake of students next year by 6 per cent in anticipation of new cuts in spending in 1980-81. Dr Edward Parkes, chairman of the Universities Grants Committee, says it is "inevitable" that the target of 308,000 university students in 1981-82 will be reduced. Dr Boyson says some subjects should shrink to allow others to expand: "The way to economic success for Britain is not to go on having an endless supply of people going up in the most expensive university system in the world—to read whatever course they want in whatever university they want."

OCTOBER: Vice-chancellors publish a letter received from the UGC warning that there is unlikely to be any growth in real terms in university grants "for a number of years". Universities will have to reduce their first-year intakes to keep overall numbers level. The letter also announces that overseas students, whose fees are up 13 per cent at universities, will have to pay the full economic cost of their courses. Sir Alec Morrison, chairman of the Committee of Vice-Chancellors and Principals, describes both decisions as "potentially disastrous".

NOVEMBER: The Expenditure White Paper announces that education spending in 1980-81 will be £411m less, in real terms, than in the current year. No figure is given for the universities' current grant next year, but the White Paper confirms that from autumn 1980, overseas students will have to pay the full economic cost of their courses. For the universities, minimum fees are set at £1,000 a year for arts courses, £2,000 a year for science courses and £3,000 a year for courses in medicine, dentistry or veterinary science. Polytechnics and colleges overseas students will have to pay £3,300 a year for laboratory and science courses, and £2,000 a year for classroom courses.

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cellars in no doubt that there will be fewer places in universities for new students in coming years. To keep overall numbers level, as the UGC recommends, the number of first-year entrants cannot exceed the number of university leavers. And since university recruitment has been on a rising tide, intakes must fall to avoid an overall increase in numbers.

As if the prospect of falling intakes were not dramatic enough, the decision to discount overseas students from the calculation of the recurrent grant provoked an angry and immediate response from the vice chancellors. Sir Alec Morrison hastily convened a press conference to describe the proposed changes as "catastrophic" for some universities. British institutions would price themselves out of the market for overseas students, and the UGC had seen to it that the income forfeited could not be recouped by recruiting more home students, he said.

Meanwhile, the UGC has asked individual universities to work out, by the end of the month, the alternative impacts of no growth, a 5 per cent cut and a 20 per cent rise in their recurrent grants for next year. But very few are ready to meet the deadline until the overall picture of Government spending plans becomes more clear. They have been both stunned and confused by the Government's action; stunned by the nature, intensity and timing of the cuts, particularly in relation to overseas students, and confused because they still do not have hard figures of prospective student targets with which to work.

As an example, university officials in the north west had to call a hurried conference to see if they could agree what the UGC letter meant.

Universities facing a siege economy

The uncertainty about the future has caused the University of East Anglia to suspend its 1979-80 estimates. The decision was made after an announcement of £8m university spending cuts made in the June budget, and has been confirmed as worse has followed.

The Schools have been told that when considering student numbers for next year, they must assume no additional teaching staff. Of great concern to the universities is the UGC warning that future cuts may include supplementary spending in full for pay and price increases.

At UEA the university tried to hold back local negotiations with a small group of maintenance staff simply because of the financial unlikelihood. In this event, industrial action, the ending of the national engineering strike and the fact that the settlement date is December 1, made it impossible.

And this is just the tip of the iceberg. The recent NALGO settlement recommended a 9.4 increase plus a reference to the Glass Commission on comparability. University teachers have put in a claim for a 30 per cent rise. Cash limits allowed for a 5 per cent rise in pay. Universities are increasingly worried about their future ability to pay.

At Sussex the university has asked its planning committee to suggest ways of saving £1 million a year by 1984-4. In the short term it has recommended to Senate a reduction of 20 per cent in the number of students. Areas would be closed down, and a levy imposed on them at the end of 1979-80. Areas would also lose their discretion to fill 50 per cent of academic vacancies. In many areas, the cuts would be a virtual freeze on non-academic vacancies. Mr Stephen Briggs, Vice-Chancellor of Sussex University, estimates that the proposed reductions in the university income caused by the spending cuts and the new system of fees for overseas students could result in a 10 per cent cut in the number of students.

'There will definitely be a lowering of standards. Some people will have money but not the quality'

He does not countenance any suggestion that staff would have to retire early, calling that "a gesture of despair".

"But the other way is to say that we are quite competent in doing research and special investigations and we may have to earn more in that way." As at most universities, the calculators are out at Manchester trying to work out what the proposed increases in fees for overseas students would cost. The problem is that nobody knows whether the same proportion of overseas students will come back if the fees go up as proposed.

The students have organized a fees strike and about 200, many of whom are in financial difficulties, have joined the action. The university, which has made clear its objection to the Government proposals, have given overseas students an extended deadline for payment. The registrar's department has taken up cases of individual hardship.

At the Manchester Institute of Science and Technology, where 32 per cent of students are from abroad, there is sadness, but also confidence that reasoned argument will prevail and the proposals will be modified.

Nevertheless staff in some departments have said that their overseas numbers could drop by as much as 50 per cent, creating a financial hole which only Government funds could fill.

Professor Ralf Dahrendorf, Director of the London School of Economics, said the proposed overseas student fees would create massive problems.

The suggested minimum of £2,000 was already on the upper limit and would seriously affect the numbers of African scholars attracted to the school. He estimated that the LSE would lose between 10 and 15 per cent of its income in the first term.

He said the general theme of the Government's policies on overseas students, immigration laws, cuts in the BBC or its attitude to the European Community, indicated parochialism and a withdrawal from the world.

"Our students say the present fee is already beyond their means. We will have to look carefully at all applications. I say this with tears in my eyes; there will definitely be a lowering of standards. We will have to accept some people who have the money but not the quality."

In a unique display of university and student opposition to the education cut-backs and the proposals on overseas fees, Lancaster agreed to hold a joint teach-in.

A spokesman for the university said that the Sir John Gorton Chamber had the full co-operation of Professor Philip Reynolds, Acting Vice-Chancellor, as a means of showing a united front against the cuts.

Professor Reynolds has said that between 1972 and 1978 the cost per student at Lancaster had declined by 13 per cent in real terms.

At Glasgow, the University Court said that over the past four years the university's income per student had dwindled so much that the efficiency of teaching and research was threatened. The cuts imposed since June would reduce by 11 per cent those resources on which universities had previously been encouraged to plan their development up to 1982.

The current proposals might prove to be "the blue-print on how to become an academically underdeveloped country within the university lifetime of an undergraduate."

At Reading the standing committee of convocation has authorized a letter to the Government demanding any action which limits resources or student intake. They are extremely concerned that the benefits enjoyed by them may be denied to later generations.

At Essex, as a contingency measure, the university has reduced recurrent expenditure in 1979-80 by 2 per cent (approximately £150,000). The bulk has been made up by delaying staff appointments and cutting departmental grants.

Dr Albert Sloman, Vice-Chancellor, said that over the past seven or eight years there had been a 10 per cent drop in real terms in the unit of resources. The Government will take about level funding, but the money will be used to raise educational standards, to carry out basic research, to train people for the professions, to assist industry, commerce and the public services and to make a contribution to the arts, media and society.

At Stirling there is great concern about the 6 per cent cut in student numbers. The intake next year would have been up by 6 per cent, so the effective cut is 12 per cent.

The new universities feel they are worse off than older established universities as they do not have endowments and other reserves, however small, on which to fall back.

Surrey, which thinks it could reasonably expect level funding for home students, still considers this to be bleak news because of the steady demand for places and the effects of the bulge in the birth rate.

At Southampton and Reading there has been a freeze on appointments, if only to give a temporary freedom of action.

Dr David Harrison, Vice-Chancellor at Keele, has said the CVCP will want to look very hard at the suggestion that universities might be able to charge differential fees for overseas students.

A spokesman at Hull said that the UGC projections were so severe that they did not provide any sensible basis on which to reallocate or redeploy.

"We face a siege economy and a continuation of contingency planning. We have particular fears over the inadequacy of the base line and the catastrophic effects of proposed fee increase over overseas student numbers."

At Oxford, where the implications of the UGC letter are still being studied, it is likely that there will be a recurrent deficit of £1m for 1979/80. Senior tutors and others are being consulted about the implications of Government policy.

A spokesman said the university strongly deplored the proposed changes in overseas student financing. "We are an international university of great intellectual stimulus and vigour. We attract scholars from all over the world. There is universal disapproval and apprehension about the proposals."

The fear at Loughborough is that unless there is supplementation for this financial year, it may have to go into the red for the first time. The university has already cut its spending on minor building works by £200,000.

Dr Clifford Butler, Vice-Chancellor, estimates that the full economic cost of overseas students were to be charged, then the university could only maintain their numbers to half its present level.

At Imperial College, Lord Flowers the Rector, referring to increases in overseas fees, said: "This disastrous discrimination betrays the moral authority which has so long earned respect for Britain among the community of nations. It removes opportunities for postgraduate work from poorer students of the Third World."

According to Leicester, the university faces an immediate future, with others in which the maintenance of standards must be at risk. This is a time when the number of applications for first degree places from good candidates is higher than ever and the university has just admitted more first year undergraduates than ever before.

Sir Peter Swinnerton-Dyer, Vice-Chancellor at Cambridge, criticized the unpredictability and inconsistency of Government policies.

The Open University has had to take its share of the cuts, with support from a number of local authorities taking a severe beating for the current financial year. For example, Hertfordshire, which had planned to launch a hardship fund for OU students, is planning to save £5,000 by deferring part of the scheme.

The OU has made budgeted savings of £1.7 million in reaction to the expenditure cuts. The chief worry is what kind of supplementary work they will get for inflation, salaries and VAT increases, the latter of which will cost the university £1 million in a full year.

The Association of University Teachers has launched a campaign to make the public aware of the importance of the universities and the contribution they make to the nation.

In a report called *The National Contribution to the World* it sets out the purposes to raise educational standards, to carry out basic research, to train people for the professions, to assist industry, commerce and the public services and to make a contribution to the arts, media and society.

search, to train people for the professions, to assist industry, commerce and the public services and to make a contribution to the arts, media and society.

The AUT financials that there is made on the country's investments in the British university system. A total contribution would, at a conservative estimate, be around £500 million.

After the sterling lead taken by Sir Alec Morrison, chairman of the CVCP, the committee has followed the move by informing the Secretary of State for Foreign and Commonwealth Affairs of the full benefits which accrue through overseas students.

Of course the picture is not all gloom. A day after the warning that some universities were near to bankruptcy, Bath got permission to go ahead with a new building costing £4m.

Benefits of science are delayed

In a recent speech to the Royal Society of Medicine, Prime Minister Margaret Thatcher pledged her support for Britain's basic research effort. "I am wholly committed to British science by inclination and instinct, by having had just a little experience of both its basic research and its application, and by observing its tremendous benefits for our people," she said.

But Mrs Thatcher's Cabinet is now preparing to cut £8m from the £320m originally earmarked for next year's science budget.

And bodies such as the Agricultural Research Council, which receive much of their funding from other Government departments on a customer-contractor basis, are facing further problems because government departments such as the Ministry of Agriculture could reduce even more cuts than the 2.5 per cent to be imposed on the research councils. If this happens, the Advisory Board for the Research Councils will no doubt be asked to give them a more favourable distribution of the science budget cuts—a move that will be opposed by councils such as the SRC which receive no funding from other Government departments.

The real problem, he warned, would come in future years, and he urged that the guidelines for 1981-1983 be made known as soon as possible so that the SRC could plan adequately for the future. Plans for expanding industrial postgraduate schemes, for instance, were being hampered because of cash uncertainties.

Professor Allen urged a return to level budgeting for scientific research after 1980-81. "Unless this happens, it will not be possible for Britain to invest properly in technology and trained manpower to take advantage of the economic stability which the Conservative Party are expected to induce in the next five to 10 years."

For the moment, the SRC can cope with the cuts by limiting plans for major facilities at its own institutions, while protecting spending at universities. This would mean limiting the number of supporting devices for the Nuclear Structure Facility at Daresbury and putting back the completion date for the Neutron Spallation Source at Rutherford from 1982 to 1983 or 1984.

However, the limited extent of these cut-backs, alongside several major problems now afflicting university research. Apart from the crisis over staff re-employment in science departments, which the SRC hopes to alleviate through its special research fellowships, university equipment funding has dropped to a dangerously low level.

Indeed, the dual support system—by which universities provide well founded laboratories while the research councils pay for special equipment and for postgraduate students—is now "creaking very badly", Professor Allen warned.

The real difficulty lies with the University Grants Committee equipment fund, which has slumped alarmingly in real terms. Laboratory equipment that was expected to last only eight to ten years has now been used in many departments for more than 15 years and with no sign of replacement in the near future.

However, to some extent, there is good news in this area, for the UGC equipment grant for 1980-1983 is expected to be £35m, up from £30m in 1979-80.

About £6m of this will be spent on furniture, however, while the recent increase in VAT from 8 per cent to 15 per cent represents a further erosion of about £3m. To compensate the UGC is urging the Treasury for a special VAT supplement to be included in its budget inflation readjustment at the end of this financial year.

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The serious limitation to UGC's ability to properly equip university laboratories can be gauged from the SRC's recent £7.5m equipment allocation to researchers.

The SRC—wisely assuming that such funds were by no means guaranteed for further years—spent the sum entirely on equipment. And when it invited applications for the grants, it received proposals from researchers that would have totalled £35m, half of which were graded first class by the council—a measure of the desperate lack of proper funding.

The SRC and the UGC are by no means the only bodies facing problems in attempting to organize research on restricted budgets. The Medical Research Council, already faced with a 5 per cent reduction in June plus the VAT increase and high staff costs at its many institutions, has warned that it will have to reduce the scale of existing research programmes and cut back support for new work.

And bodies such as the Agricultural Research Council, which receive much of their funding from other Government departments on a customer-contractor basis, are facing further problems because government departments such as the Ministry of Agriculture could reduce even more cuts than the 2.5 per cent to be imposed on the research councils. If this happens, the Advisory Board for the Research Councils will no doubt be asked to give them a more favourable distribution of the science budget cuts—a move that will be opposed by councils such as the SRC which receive no funding from other Government departments.

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'It is no good tinkering with a system to meet short-term needs'

A feeling of relief at polytechnics

In contrast to the universities, the polytechnics have emerged from round one of the Government's assault on public spending with a feeling of relief.

For the current financial year few are facing cuts as high as 3.5 per cent, with most hovering around 1 per cent. Polytechnics like Teesside and Birmingham, with a traditional resource problem, have suffered only token cuts.

There is a feeling that—at least so far—the polytechnics are being spared because of their continuing success in matching their teaching to the needs of industry. What the rate support grant and the "pool-capping" exercise hold in store for one is sure.

One reason why the cuts in this year's Budget may be less severe than many dreaded is that most polytechnics spend the greatest proportion of their budget on staff and other fixed outgoings.

Travel, teaching aids, library services and other areas are having to bear the brunt of this year's savings, although elsewhere the delaying of new staff appointments and similar plays are proving sufficient.

For the future, most polytechnics have been told that they will have to carry their share of cuts. But until the rate support grant is announced, all they can do is draw up contingency plans.

At Lanchester, Coventry Council called for a 4 per cent reduction in 1980-81, and a further 2 per cent in each of the next two years. When the polytechnic studied the implications, it became apparent that development plan targets would need to be lowered, and it is now probable that the city council will accept a lower level of cut.

The extra cash made available to Teesside Polytechnic to help it meet the demand for "substantial improvements" made by the Council for National Academic Awards has

been saved from the cuts. Cleveland County Council has been spared much of the brunt of the cuts, having over two years—of which £750,000 is to be spent this year. The polytechnic's budget for the current financial year has been trimmed by a mere £6,500.

At Wolverhampton, the decision of the council to defer the Government over spending cuts this year has put the polytechnic in an enviable position, although it is being suggested that 1980-81 will be a year of no growth.

At least two London polytechnics, students have been turned away as a direct result of the cuts. At Middlesex an enforced freeze on staff recruitment was to blame, while at Central London elimination or restriction of funding from TOPS and the SSRC has led to two diploma courses not running.

There are, however, numbers failed to reach ILTA minima.

Many directors accept the argument for some rationalization in the polytechnic sector. But they are angered by the suggestion by Lord Flowers, Rector of Imperial College, that there are far too many polytechnics. They point to the work done by the polytechnics in matching their teaching to the needs of industry in an increasingly technological society.

Mr David Bethel, chairman of the Committee of Directors of Polytechnics, put in a plea for a strategy from the Government. "It is no good tinkering with a system in part to meet short-term policy aims. You really need to have a policy planned."

Britain is hit by overseas fees policy

Undoubtedly the most controversial of the Government's detailed plans for savings in higher education has been its decision to charge full economic fees to overseas students from next year.

Neither the unpopularity of previous regulations nor the predict-

ability of the latest measure have Counted much to defuse the criticism. Seldom has such unanimity been achieved between students, academics, administrators, voluntary bodies and professional associations.

With only the details of implementation to be finalized, the bald facts spelled out in the White Paper are that universities, colleges and polytechnics will be compelled for the first time to set fees which meet the full cost of overseas students' courses.

In the maintained and voluntary institutions this will amount to £3,300 for advanced courses based on laboratories and workshops (£1,890 for those in non-advanced further education), and £2,400 for advanced classroom-based courses (£1,380 non-advanced).

In the universities, minimum charges have been set at £2,000 per year for arts courses, £3,000 for science and £5,000 for the clinical year of courses in medicine, dentistry and veterinary science.

The proposed new levels come in the wake of this year's increase, originally set for 9 per cent and later brought up to 33 per cent as a result of the June Budget. These combined with the much-criticized quota system, threatened to spark a revolt among the universities, almost half of which were set to defy Labour's quotas for the number of foreign students they could admit.

Now, however, quotas are a thing of the past. But with them has gone the option of taking an independent stand on fee levels. The simple expedient of reducing universities' grants nationally by 13 per cent—the proportion of overseas students—has redistributed the cuts according to the foreign totals in each institution has seen to it that none is likely to step far out of line.

Even those, like Bradford University, which have previously refused to differentiate between categories of students are now reluctantly changing policy.

Arguments have been advanced that the £100m subsidy quoted by successive governments as the cost of overseas students to the taxpayer is grossly inflated. The

United Kingdom Council for Educational Research has shown that this particular balance sheet shows a net gain to Britain of £22m because of improvements in the seas trade which could be attributed to the education of foreign personnel in Britain, the benefits of foreign exchange earnings from students from abroad, and the value of their unpaid research.

Now organizations are queuing up to register their protests, with those who are considered too moderate in their statements (notably the Committee of Directors of Polytechnics) being investigated in public. Students, meanwhile, have begun their most militant and widespread campaign for several years, staging waves of occupations and demonstrations in opposition to the new fees and education cuts generally.

Ministers argue that British fees will still be competitive with those elsewhere, and that previous increases have had little effect on the numbers of students coming from abroad. However, since almost all the most exclusive American universities are setting lower fees than those envisaged in Britain and the new rises are unlikely to be cushioned by a weak pound, the impact seems certain to be more severe this time.

At this stage, one can only speculate about the effects of the new fees, but it is obvious that numerous courses, particularly in the hard-pressed applied sciences, will be in danger if there is the expected drop in recruitment.

While prestigious institutions such as the London School of Economics and Imperial College, London, which have high proportions of overseas students, may be able to weather the storm, others would surely be less lucky. The number of foreign students in higher and further education will not have to drop far below its present total of 35,000 for considerable disruption to result.

Not only will courses close but institutions will be unable to recruit more home students to fill the gaps, since their budgets will have been reduced, leaving further cuts as the only alternative.

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BRIEFING

The Doctor's prescription for cuts

Dr. Rhodes Boyson, Under-Secretary for Education, answers some questions for The THES

As a result of Government intentions to cut spending, the University Grants Committee has warned universities to reduce their intake of students. Since we are still on a rising tide of 18-year-olds, does this mean many able students will be unable to gain a place?

It is far too early to predict with any certainty what the effect of expenditure restraint on student numbers will be. Throughout the developed world there is a lower uptake of places than we had expected say 15 years ago. A lot of young people are voting with their feet and going into jobs at 16.

I am not saying whether this is a good or a bad thing. But the proposition that it was a good thing for a vastly increased proportion of young people to go on to higher education is no longer the attitude of the consumer. If the Robbins principle being abandoned?

Robbins never promised that anyone at 18 would go on whatever course they wanted at whatever university they wanted. There is a great deal of difference between what the agitators say Robbins said and what he actually said. If universities are for the very academically able, and I believe they are, do two A levels necessarily mean they are therefore academically able? I would have the gentlest doubts about that.

The Robbins principle was not brought down by Moses nor a part of the laws of gravity. It was an indication of what was accepted at that time. The pathway to university must always be open to the academically able in this country. But a period of consolidation will do no harm. All the dons I talk to privately—as against the pressure groups and vested interests in society—I find agree with me. You have said you would like to

foster courses which are desperately needed and restrict those which do not lead to jobs. I think universities are for three things. The first job is the preservation of academic excellence. The more universities expand the more they have to remember what academic excellence is. They must make sure expansion does not threaten academic excellence by packing in too many work horses, as against the really academically gifted.

The second job of the universities is to develop the individual. But the individual cannot demand for himself without casting an eye on society, otherwise it is the height of personal arrogance. Universities exist within the community, particularly now they are largely funded by government. If they are funded by government they cannot turn round on their paymasters and say "We have no need to be responsive to what you want."

I believe the students about to go up should know that too. If you want to study something, you should know whether it is likely to lead to a job or a niche. The Government's decision on overseas student fees has been sharply criticized, both for its effect on university financing and Britain's world reputation. Why do you want to see overseas student numbers fall?

Our job is cutting government expenditure. Overseas students—and on this I have not the slightest doubt—were costing £100 million a year. This calculation of the cost I accept totally. All the funds have come from the university lobbies and not from the general populace. What about the non-quantifiable benefits? Two out of five overseas students are from Iran and Nigeria. We do not seem to have gained much ad-

vantage from Iran, nor from Nigeria, who nationalised our oil without paying for it. If that investment is some to be the worst we have ever made.

The British universities are funded by the British rate and taxpayers, not from outer space. We want them to be international institutions, but the numbers of overseas students have increased three times over in 10 years and the Labour Government tried to limit it by quota. Some other action must be taken to make sure the ones who come are the ones who ought to.

We are funding bursaries for research scholars. We are looking at what can be done for EEC students. But I do not believe in the British working and middle classes actually subsidizing students, a quarter of whom come from countries per capita richer than ourselves. What was your reaction to the outcry?

I think it was just a knee-jerk of the left. I believe if the universities fail to recruit enough foreign students prepared to pay the new fees to make good the hole in their income?

Let's meet that when it comes. I must say the universities seem slightly hysterical about this, but do not seem to have much evidence. For example in 1976 the Labour government increased fees for 1977-78 by between 40 per cent and 105 per cent. Yet there were 4,000 more students here the next year. We will see what happens. The cries of "run for cover" are rather premature and we will obviously look at the situation. Is the Government thinking about any changes in the system of mandatory grants to full-time students? If more money and less vouchers, we would probably have made more



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grants mandatory but one cannot afford that at the present time.

What is the Government's view on a system of student loans?

Loans have been examined by governments over the past 10 years. It is something we are considering within the Department as part of a long term assessment of the financing of higher education, but there are no plans for immediate introduction. There would be no immediate financial introduction if a loan scheme had been included in the present cuts.

It has been suggested the polytechnics are deserting the role for which they were created. Have they moved too far up-market? The colleges of advanced technology were set up to do a specific job and turned themselves into universities there is a risk the polytechnics will try to move on to become universities because this is the traditionally respected pattern. I do not want them to become

second or third-class universities; I want them to be first-class polytechnics. This is what Anthony Crosland wanted when he set them up.

I see the universities preparing to produce apprentice scholars. The polytechnics are to produce apprentice engineers, scientists, business managers. Will you be pushing them more in this direction?

All I can do as minister is to indicate the climate of opinion. My job is to interpret the general feeling. The last Government placed a lot of emphasis on Model B and continuing education. Will the new Government foster such developments?

Model E is something I am very keen on. This is something the polytechnics, with facilities for mature part time students, should emphasize. They are mostly in centres of population where people can travel from home every day. The Open University too offers people the opportunity to study at home.

Won't this mean more cash will be made available to finance new developments? The idea of the bottomless purse is unimaginable. It just means you cannot handle the money you have got.

You have a reputation as an able politician who speaks his mind in the rather private and seldom world of higher education, is your personal style a drawback?

It is not really for someone to pass an opinion on himself. At a time of assessment I see my job to ask questions, not to dictate in any way. Since I took this job, a lot of my views have changed by actually seeing what goes on, and talking to people. I did not come in with a lot of ten things I wanted to do. I did come in with respect for the universities, polys, OU, and the rest, but as someone who in a time of financial restraint, when past expansion has come to an end and less temporarily, asks where we have got to.

Education, put it: "To slash the proposed growth in the YOP is such a time to light the fuse of the time bomb of resentment which has built up among the country's young people."

Much more insidious are the results of budget cuts on college projects. This has affected the entire scale of provision being offered to 16 to 18-year-olds. It ranges through a reduction in post-O and A-level courses to cut in vocational courses including such as engineering, electronics and craft studies.

The long term effect if applied to other I.E.S.s could change the whole nature of further education and reduce the number of students taking courses leading to professional and other qualifications. Added to this the Government's decision not to introduce the proposed scheme of mandatory grants for 16-18 year olds staying in full-time education in schools and colleges at a mere saving of £100,000 for the age group.

Fears of end to adult education

Substantial areas of the country could soon be deprived of any opportunities to participate in adult education if proposed local authority cuts are allowed to go ahead.

The National Association of Teachers in Further and Higher Education is alarmed by the announcement of the intended cuts that it has asked the Secretary of State to act under powers vested to him in the 1944 Education Act, to ensure that all local education authorities are obliged to provide adult education.

NATFHE is particularly concerned with the intention of I.E.S.s such as Nottinghamshire, Humberside, and Hampshire to either suspend their adult education services or else cut them to such a drastic extent that they will be almost totally curtailed.

In Retrospect

A year of swings and roundabouts

by Peter Scott

The year 1979 was a pendulum one for higher education—swinging from qualified optimism in the spring to unqualified pessimism in the autumn, from precarious financial equilibrium to the most severe cuts for a generation, from hopeful talk of Model E and continuing education to gloomy demands that institutions must be protected even if weaker (but sometimes less conventional) ones must go to the wall.

The swing event was the Conservative victory in the general election on May 3—but that was not the whole story. Well before the election there was already a sign that the position for higher education was deteriorating. Although the public expenditure White Paper in February allowed for a modest 9 per cent growth in the spending up to 1983-84, no apparently confirming the trough of 1977-78 by April rising inflation and slow economic growth had almost certainly persuaded Mr Callaghan and Mr Healey of the need for further cuts.

In the case of higher education this downward revision was doubly reinforced by the fall of student demand to reach its anticipated level. As early as March lower projections for the number of qualified school-leavers had led to the expected total of students in 1981 being cut from 580,000 to 530,000 (and the 1980 "hump" from 600,000 to 580,000). Soon after actual enrolment patterns seemed to indicate that even this reduced target verged on over-optimism.

Model E, too, had already begun to fade—from a clearly articulated option in the discussion document *Higher Education: The 1980s* to two waffly and evasive paragraphs in the follow-up report from the DES *Future Trends in Higher Education*. All in all, it is perhaps fortunate for the reputation of the Labour Party and for the credibility of its higher education policies that the Conservatives won the election.

In any case, over-emphasis on the change of government obscures a more fundamental shift. When time has provided a decent perspective on present events, 1979 may be seen as the year in which the Robbins era finally ran out for higher education (and similar areas ended right across the field of social policy). The mortal blow to the assumptions of the 1960s may have been struck in the crisis years of 1973-75, but since then there has been a sincere and sustained attempt to restore them. Indeed this attempted restoration will perhaps serve as a model for the Callaghan-Healey-Williams years.

For higher education this attempted restoration has been the focus of the painful road to recovery—the struggle for a decent level of funding, a fair deal for public sector teachers, a decent level of university salaries, and the restoration of the planning horizons for universities. Indeed it went further than before with the attempt in the Oakes report to institutionalize the binary settlement of the mid-1960s by providing more rational and stable arrangements for funding polytechnics and colleges.

But the attempted restoration was not of mechanical arrangements but of a whole ethos. This ethos can best be described as an attempt to be described as the preservation of a traditional, even elitist, core surrounded and so modified by a less traditional periphery which was constantly growing as more resources were poured into higher education. This perspective was a reminder of the growth in the 1950s and 1960s of the great campus universities of America which all too incidentally radicalized a whole generation.

In 1979 this perspective finally faded. First, the mechanical planning horizons disappeared. Then the security of the universities the year. The UGC worried that the range had shrunk to 580,000 to

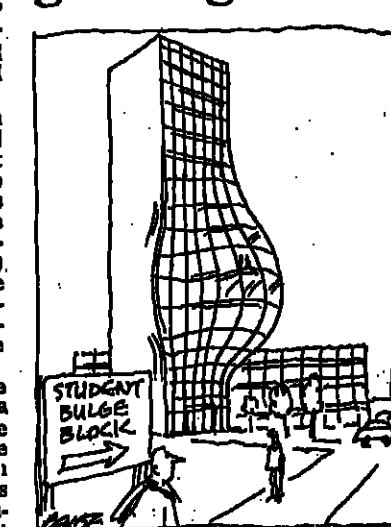
have to be cut just to create a "steady state system", perhaps privately hoping that this blatant breach of the Robbins principle would abash Dr Rhodes Boyson. He was not abashed. The Oakes arrangements were buried to be replaced by a crude cash limit attempt to "cap the pool" foreshadowed in last month's Education Bill.

But the failure of the 1976-79 restoration also forced higher education to question some of its most basic assumptions—which is more important than any mechanical breakdown. Put simply, it will become more and more difficult for higher education to have its cake and eat it. As Lord Flowers, of Imperial College, has suggested, truly excellent institutions can only be adequately protected at the expense of the less excellent in a time of no growth. But such a policy would reduce still further the small element of radicalism in British higher education and make its implicit elitism explicit. On the other side, the whole justification for Model E and all that it stands for must be re-thought.

The map drawn up for higher education in the 1960s which has continued to be used with increasing difficulty in the deteriorating circumstances of the 1970s is now quite out of date. The most important lesson of the last months was simply that. The most important task for 1980 is to start to draw a new map.

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The shrinking hump—the growing cuts



by Peter Scott

As the 1970s proceeded the "hump" in student numbers expected in the early 1980s slowly dwindled with each new projection from an overwhelming and even oppressive presence that entirely dominated the higher education planning into a still difficult but manageable problem.

In 1979 this "hump" shrunk even more until it seemed hardly more than a little bump—and then was swept off the planning agenda entirely by the more urgent crisis of the cuts. Ten years ago Planning Paper Number Two predicted that universities, polytechnics and colleges would need to enrol more than 800,000 students in 1981 if entry standards were not to become more fierce. By the start of this year this projection had shrunk to 560,000 officially (and to about 530,000 unofficially).

All this happened before the Conservative victory in the General Election on May 3 and any serious cut of a whole ethos. This ethos can best be described as an attempt to be described as the preservation of a traditional, even elitist, core surrounded and so modified by a less traditional periphery which was constantly growing as more resources were poured into higher education. This perspective was a reminder of the growth in the 1950s and 1960s of the great campus universities of America which all too incidentally radicalized a whole generation.

In 1979 this perspective finally faded. First, the mechanical planning horizons disappeared. Then the security of the universities the year. The UGC worried that the range had shrunk to 580,000 to

540,000 with a most likely total of 560,000 (which conveniently coincided with the Government's target in terms of available resources).

Even this was not the whole story. Unpublished but authoritative totals of as little as 530,000 were circulating within the department early in the summer even before the impact of the new government had had time to be felt. With a present total of more than 510,000, the "hump" had drunk into a very small bump indeed.

This has had two important results. First, Model E and all that it stood for has suffered a serious setback. After all, the original idea was that higher education should use the resources provided to accommodate the "hump" to expand continuing education during the demographic trough of the late 1980s and early 1990s when the supply of conventional students declined. No "hump", no extra resources. This was a dilemma which would have been forced to face.

Dr Richard Hogart, the apostle of Model E, was only speaking the truth when he told the DES/THES conference that the attempts by higher education to diversify had been too little, too late. That judgement was reinforced two months later by the Conservative victory at the election.

He was almost certainly being more realistic than Dr R. M. W. Rickett, director of Middlesex Polytechnic, who told the same conference that an age participation rate of 13 per cent did not represent the true potential for higher education among school-leavers.

The second result of shrinkage is the more intense competition for students that it will provoke between institutions and between higher education and the rest of the economy. A period of much harsher institutional rivalry as had happened in the United States when expansion slowed down.

This rivalry has already begun. Polytechnics have accused universities of accepting students who they, the polytechnics, did not regard as suitable for degree courses at all. The universities have replied that the increase in the number of students accepted was only half that in the number of UCCA applications.

Indeed some university leaders have gone further and begun to question the established Government policy of "even-handedness" between the university and public sectors; if universities can attract more students let them expand, and let those other institutions which have greater difficulty with recruitment face the consequences.

So the numbers game, although at present pushed into second place by the cuts, will remain an important strand in higher education policy and planning. The two together mean that higher education will have to operate in a market environment to a much greater extent than in the past. More, perhaps, perhaps, they mean that, although Model E may not come in the front door of social democratic planning, some similar form of diversification may be pushed through the back door by market forces.

The pressing need to recruit students, with the threatening prospect of dwindling resources for those departments, institutions and sectors that fail, may in the end be a more powerful stimulus to change than pious planning at the Centre.

Pay delays cause anxiety

by Ngalo Crequer and David Jobbins

University teachers are becoming increasingly anxious about the delay in the progress being made on their 30 per cent pay claim.

Hard negotiations about money are a long way off. The Association of University Teachers and the University Authorities Panel are still waiting to hear the Department of Education and Science Views on three crucial elements in the claim.

These are the amount of an interim increase payable from October 1979, the question of the

staging of payments, and the whole issue of a comparability study.

At the same time, universities are seriously considering their response to the University Grants Committee letter on cuts in resources as they are seriously concerned about their ability to pay for substantial rises.

This year has been one long pay battle for the AUT. Last month 30,000 university academic and related staff received the last round of their previous claim, which rectified the anomaly in their pay.

This means that, including weighting, the lecturer's scale ranges from £4,333 to £8,992 per annum and a senior lecturer or reader's scale from £8,698 to £10,775. The minimum for a professor is £10,998 and the average is £12,862 per annum.

When the last pay claim was settled it was generally agreed that there should be some study of the question of the feasibility of looking at university teachers' pay in relation to that in other public sector groups.

But as the year wore on, it became clear that no wholesale study could be successfully completed in time before the October '79 settlement was due.

What concerns the AUT is that the value of salaries had fallen by between 30 and 40 per cent, according to the movements of earnings indices.

In July this year Committee A, which represents the AUT and the UAR, agreed to propose to Committee B on which the DES is represented, that a start should be made to correct the erosion in pay, which they said was in the order of 30 per cent.

In terms of pay, university lecturers compare themselves with the administrative and scientific civil service, as well as those employed in specific disciplines, such as the law and accountancy. Detailed statistics have been drawn up to show

that workers in the service jobs will have a pay between January 1979 and January 1980, leaving lecturers behind.

In August Committee B met, and it is understood that the DES agreed that, without putting a figure on it, an increase was due from October 1st, 1979.

Representatives from the DES pointed out that groups of workers from the public sector, which had been quoted, had had the erosion of their pay restored either fully or partially, by stages and in many cases, as the result of comparability exercises.

Thus, earlier talk about feasibility gave way to consideration of a full-scale comparability study to be undertaken by the Clegg Commission.

The AUT, subject to the approval of its council, would be quite willing to take Clegg on board and already has a wealth of detail which it could present in evidence.

But it expressed its concern on two points. There would have to be a satisfactory (yet undefined) October 1979 interim settlement, pending Clegg. And the arrangements for the timing of any staging of payments would have to be made quite clear. It is also not clear what the terms of reference of any comparability study would be.

On staging, the AUT would be looking for a short period, in the region of about nine months. They accept there is no likelihood of their claim being paid in one stage.

University lecturers are now waiting for the DES to come back on these points. Last month local associations were urged to put pressure on their Members of Parliament to speed up the Government response.

Obviously the issue of pay for all university staff is inextricably linked with the whole question of funding the higher education sector. The universities and the AUT have made it clear that government finance must be made available to

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'To slash growth... is to light the fuse on the time bomb of resentment'

Colleges look to private enterprise

continued from page 9

There is a feeling of *adieu* in many of the colleges and institutes of higher education as planning for this academic year, let alone future years, goes back into the melting pot.

While the cuts follow no consistent pattern the effects in a number of institutions are likely to be severe. Reductions of up to 10 per cent on this year's estimates have left principals with the difficult task of finding items which can be

omitted without forcing them to curtail or even close certain courses.

Options are limited by major items, notably staff costs, which can be reduced only marginally in this financial year. As a result, the scale of the cuts is greatly magnified in areas where savings can be made.

Mr John Barnett, chairman of the Standing Conference of Principals and Directors of Colleges and Institutes in Higher Education, summed up the frustration of his colleagues: "I cannot but ask what kind of encouragement it is for good house-keeping when institutions do not know the sums at their disposal until well into the financial year to which they refer; when they are asked to make cuts of 5 per cent across their whole budget at stage in the year when all their

staffing costs are fixed, so that the cut amounts to 30 per cent on the headline which results in a loss of libraries on field work, on academic equipment and resources."

In Mr Barnett's own college, Ripon and York St John, just such a situation has arisen, with the DES effectively demanding a 5 per cent cut well into the financial year. "It represents the equivalent of closing two whole study areas and saying to students already accepted for those courses: 'You can't come here because I have sacked all the staff'."

This plight is shared by principals in most of the voluntary colleges. The DES had to revise its original estimates to compensate for unexpectedly heavy recruitment in a number of institutions, having based this year's budget on a 10.3 per cent increase to allow for inflation. With salary increases running at 15 to 20 per cent in some areas, a shortfall is inevitable.

At Goldsmiths College, for example, the whimsy has left the administration some per cent short of last year's provision and 7 per cent below the estimated expenditure for 1979-80. New staff appointments have been postponed or cancelled, some capital projects frozen and repair and maintenance items are being further scrutinized by the DES.

Elsewhere, local authorities have still to notify many institutions of the savings they will be expected to make, while others have set taken account of the current year's cuts are considering where the axe should fall for 1980-81. Ealing College is one which could yet face a bleak New Year after fighting a rearguard action against a proposed cut of 9 per cent.

Hypocrisy in the 16-19 age sector

A host of hypocrisy hangs over the cuts in the 16-19 sector. For as Ministers continue to reiterate

their commitment to safeguarding and expanding funding for the 16 to 19-year-olds, they are at the same time decimating the organizations and institutions which provide for them.

It is true that a token measure was included in the recent Public Expenditure White Paper in the form of £15m over two years for some expansion of non-vocational further education, especially vocational courses. But no indication was given as to how this money would be allocated.

Indeed, the sum on offer appears tiny in comparison with the £110m cuts imposed on the Manpower Services Commission, the main provider of special programmes for the unemployed. The immediate effect has not been drastic since the Youth Opportunities Programme, whose budget was cut by around £25m to £142m, is still able to offer opportunities to around 200,000 school-leavers.

In this light, the further cuts being planned for the Manpower Services Commission are much more worrying. In July the MSC was asked to consider cuts of £100m to £150m in expenditure, and reductions in staff ranging from 10 per cent to 20 per cent.

It is thought that cuts of this scale in expenditure would result in the closure, by 1981, of the STDF programme, whose budget and area of operations has already been severely curtailed.

In addition it would reduce clerical, management and other training on the Training Opportunities Programme. Cuts of £22m in the latter have already caused hardship to colleges which carry 88 per cent of the training. This has particularly affected commercial and clerical courses.

Staff cutbacks are considered to be even more serious, since they would result in cuts on all the programmes, and are privately considered by the MSC to be so destructive as to eventually result in the loss of experimental research and novel programmes.

Mr Mick Farley, assistant secretary for further education at the National Association of Teachers in Further and Higher

Education, put it: "To slash the proposed growth in the YOP is such a time to light the fuse of the time bomb of resentment which has built up among the country's young people."

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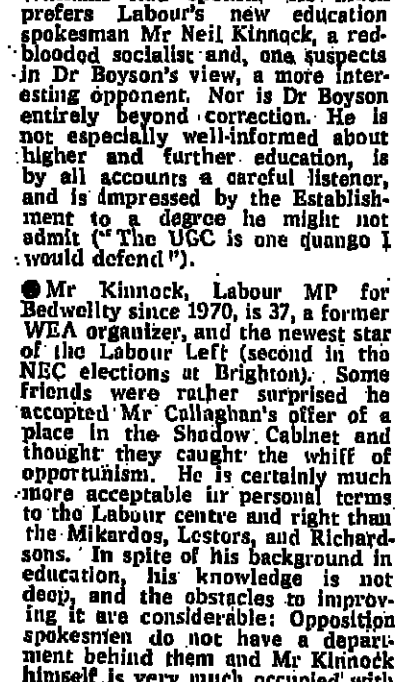
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People

motion for an MP with only the slightest parliamentary experience. Elected in 1974 to the Sutton and Cheam constituency, he served the science and technology select committee and had responsibility for the Conservative's European energy liaison, before taking up his new office.



formerly head of the Centre for Contemporary Cultural Studies at Birmingham University, which he joined in 1964 when the centre was doing pioneering work under Richard Hoggart. Stuart Hall was born in Jamaica and was a Rhodes Scholar at Merton College, Oxford.

The latest addition to the college principals' leadership, Dr. David Shadobal, of Worcester College of Higher Education, brings with him heartfelt experience of government cuts. He saw his previous institution, Northumberland College, deprived of teacher training and therefore doomed to closure within five months of his arrival.



The retirement next summer of Mr John Barnett as principal of the

Stuart Bayliss, the lone Conservative voice on the National Union of Students' executive last year, will be unwilling to take the obvious course of steering the federation rightwards—and possibly out of NUS completely—but will have to put up with pressure from both sides as government cuts begin to bite in higher education.

Mr Peter Dawson, the new general secretary of the National Association of Teachers in Further and Higher Education, is well-prepared for the tough round of negotiations ahead.

Mr Dawson, who was appointed after the death of Mr Stan Brodbridge, was NATFHE's negotiating secretary since the merger, and the Association of Teachers Technical Institutions since 1971.

Left to right: Geoffrey Caston, Prof Herrick Saul, Dr John Roberts, Prof Michael Thompson, Dr John Burnett, Sir James Lighthill

Sir Roy Marshall, who took up his post as Vice-Chancellor of the University of the West Indies in Barbados at Pembroke College, Cambridge, and has lectured in law at London and at Sheffield where he was formerly professor of rural economy at Oxford. He was chairman of the Scottish Horticultural Research Institute for 15 years and from 1964-66 served as a member of the Academic Advisory Council of the University of Edinburgh. He is also a member of the Universities Committee for Non-Teaching Staff.

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The new Provost of University College London is Sir James Lightbitt, previously Lucasian Professor of Mathematics at Cambridge. A Fellow of the Royal Society at the age of 29, he has been Director of the Royal Aircraft Establishment, Farnborough and Professor of Applied Mathematics at Manchester.

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Check its scope, its content, its new approach.

A Tale of Two Systems: field studies

Universities and polytechnics are conventionally thought of as the ancient and the modern in British higher education. Now for these common conceptions represent historical realities could be debated. But at all events since Anthony Crosland's Woolwich speech of 1965 and the White Paper of 1966 announcing the creation of 30 polytechnics there has been academic and political dispute over the validity of a binary division of higher education.

When Maurice Kogan talked to Edward Boyle and Anthony Crosland in 1970 he was given two rather different views. On the one hand Edward Boyle saw the binary system as "inherently unstable" and any attempt at precise articulation of the difference between what a university is for, and what a polytechnic is for, does not stand up. Anthony Crosland on the other hand, after making it clear that he regretted being rushed into the Woolwich speech by his Civil Servants, declared that when he had "finally mastered the subject (he) became a passionate believer in binary and polytechnics."

Crosland based his decision, or as he thought of it, confirmation, in part on the view that the universities were not in a position to give the Government what it needed at that time. They were, he thought, in the throes of post-Robbins expansion and they "couldn't possibly have given us the yet further expansion of numbers that we need." And, in any case, he believed that "the urgent need was for an expansion of polytechnic-style rather than university-style education."

Crosland's view became official policy. In the White Paper the Government asserted its belief that "the best results will be achieved by developing higher education along polytechnic lines wherever practicable." And the policy was underpinned by electoral fortune. The Conservative White Paper of 1972, *Education: A Framework for Expansion* endorsed the Labour policy and looked to the polytechnics to play "the key role" in the expansion of the 1970s.

The Committee of Directors of Polytechnics welcomed this idealistic enthusiasm tempered by realistic demands. On the one hand they affirmed their confidence in the idea of a polytechnic as an "enlightened and relevant form of higher education for the 1980s and beyond." On the other hand they set out claims for practical support which they deemed essential for success. These demands, in short, were for parity with universities. The polytechnic directors wanted a longer-term programme for student accommodation and grants for staff salaries and careers, and for administrative and secretarial support which would steadily eliminate the established advantages of the universities in all these respects.

Equality is, of course, most easily accomplished in the context of growth. But expansion of British higher education, virtually halted in 1975 and the prospect for the future is at best one of retrenchment and conceivably of contraction. Meanwhile the binary debate continues. As Maurice Kogan argues in "The Future of Higher Education," the public sector in higher education exists for historical reasons and "it is desirable to think the whole subject through again."

We can carry the discussion further, through the comparison of facts and figures about the universities and the polytechnics from my survey of teachers in both types of institution in 1978. As will be clear, the two systems are not identical. They are quite different. The differences are not only in the nature of the institutions, but in the nature of the work and the people who work in them. The differences are not only in the nature of the institutions, but in the nature of the work and the people who work in them.

... university students are more highly selected, more nationally recruited.



Edward Boyle thought it was "inherently unstable" Anthony Crosland became a passionate believer in it. The binary division in higher education has itself caused a wide split in the ranks of lecturers and politicians for well over a decade. A H Halsey examines professional attitudes towards the two-tier system.

Students in the universities as against 100,000 in the polytechnics, of whom a third were doing work below degree level as well as two thirds of the part-time polytechnic students. There were 53 universities and 30 polytechnics. The average size of a university in terms of student numbers was 5,250 and that of a polytechnic 7,000.

In general university students are more highly selected, more nationally recruited, subjected to broader curricula so that, in older terminology, they might be regarded as more educated than students. They are more domestically and intimately taught in institutions which enjoy superior physical amenities and a greater degree of self-government and autonomy.

Such differences may well be held to warrant a description as binary. Nevertheless the debate is not over and the situation is not stable. Thus, half the polytechnic teachers want to see at least some polytechnics become universities and a third of the university teachers agree with them (Table 3). Among the other half of the polytechnic teachers who do not want to see polytechnics given university status, the main reason is one version or another of the view that the polytechnics exist to serve different needs, that those appropriate to a university. Yet, when asked how they expected their own polytechnic to develop in future and given the opportunity of only one answer, well over one-third participated that their institution would become a university like a university.

Using our survey data we can approach an answer to the binary question by asking four different questions. First, who are the teachers in these institutions and how have they been selected and how have they been recruited? Second, what is the nature of their work and activity? Third, what is their conception and experience of the world of higher education and what sort of institutions and personnel would be appropriate to that world? Fourth, what is their view of the future of higher education and what sort of institutions and personnel would be appropriate to that world?

components of their demographic and social composition suggests no insurmountable barrier to a unified profession of teachers in higher education. The biographies of university and polytechnic teachers show no crucial difference of class origin or schooling, and a similar mix of political identifications and voting patterns.

A slightly lower proportion of university teachers (11.3 per cent) are women compared with polytechnic teachers (13.6 per cent) and the proportion married is almost the same in both types of institution. The university staff are on average slightly younger with 59 per cent of their members under 40, compared with 52 per cent in the polytechnics. University teachers are slightly more likely to come from a middle-class background and a third of them have attended independent or direct grant schools compared with fewer than a quarter of the polytechnic teachers. But these differences are neither dramatic nor significant.

The organisation of the profession does differ, however, on the two sides of the binary division. There is separate union membership and a different hierarchy of academic rank. The main union organisation of the university teachers is the AUEU, accounting for 89 per cent, while the polytechnic staff are divided between the NAPS (60 per cent) and APT (21 per cent).

Academic ranking, like union organisation, is a product of separate organisational history. But it entails a crucial element in the binary division and one which the Committee of Polytechnic Directors heavily stressed. There are relatively more senior posts in the universities. Writing in 1974 the committee said: "For the education of 1,000 students in a university, there are usually people at levels of seniority and responsibility which are not found in the polytechnics, where there are only about five in the salary range."

One in every three teachers

that 32 per cent of the university appointees have first class honours degrees compared with 14 per cent of the polytechnic staff recruited in the same period. The new university don is still more than twice as likely as his polytechnic counterpart to enter with a First.

When we examine job content, activities, time allocations and performances, other serious differences begin to appear, though not such as to distinguish the universities from the polytechnics by vocational function. There are no types of study to be found in the universities which are not also carried on in the polytechnics; and, ironically, the only exception is that the vocational studies of agriculture, forestry and veterinary science are confined to the universities. The idea that polytechnics are based on science and technology while the universities are based on the humanities and the arts is a myth.

Any notion that the universities are confined to scholarly "useless" studies, while the polytechnics pursue the application of science and letters to the vocational needs of an industrial society, founders on the facts. The differences are of emphasis not of categories. Pure science dominates the modern university while the comparable giant of the polytechnics is social science, including administration and business studies. Engineering and technology have a large place in the polytechnic, doctors and dentists are rather more numerous in the university than are engineers and technologists but are rare figures in the polytechnics.

Poly teachers report a heavier emphasis on teaching

The professional mix as a whole is different (and of course also varies within categories) in the two types of institution but the difference scarcely suggests functionally different types of institution. It is a difference stemming more from the circumstances of expansion; the technical colleges obviously brought in the relative weight of engineering and technology to the polytechnics, the older professions of medicine and dentistry had a firm establishment in the universities before the rise of the technical colleges, and the expansion of polytechnics was partly affected through absorbing colleges of education and the social sciences offered the cheapest form of growth.

However, when we turn from subjects to types of activity in relation to them, marked contrasts appear. University staff are much more involved with research than are their polytechnic colleagues. This basic difference of labour and outlook is reflected in both the activity and the orientation reported by our respondents. Over half the university teachers supervised research students compared with less than a quarter of the polytechnic teachers. Nearly all university teachers are currently engaged on scholarly research work which they expect to lead to publication, compared with 60 per cent of the polytechnic teachers (Table 1).

A quarter of the former have published more than 20 articles; half the latter have published none (Table 2). What is perhaps most telling about the institutional milieu is that the felt pressure to do more research than the respondent would ideally like is expressed by small and similar percentages in both sectors. University teachers report more attendance at professional conferences at home and abroad, more editorial and refereeing work for the professional journals and more involvement with the promotion of Research Councils. They are more inclined to see research as a first loyalty over teaching and administration, less uneasy about the threat on research time made by teaching demands and both more aware of the dependence of their own research as well as more approving of that relationship. By contrast polytechnic teachers include more in their view that university research is "useless research about useless subjects," including their own (Table 3).

University teachers report 40 per cent of their time is spent on research and 37 per cent on teaching. The comparable polytechnic proportions are 18 per cent and 43 per cent respectively. This is not a simple comparison since the polytechnic staff have been recruited since 1970 in turns

of the teaching staff in the universities is at the level of senior educational leadership: senior lecturer, reader, professor; in the same salary range in the polytechnics, the figure is one in about 30.

of the great Poly/Varsity mismatch

Polytechnic teachers, on the other hand, spend more time teaching: on average 16.7 hours a week compared with 15.3 for university teachers. The main difference is the amount of class teaching which more than compensates for the fact that university teachers give rather more tutorials and spend more time in informal contact with their students. Expressed as a proportion of working time the polytechnic teachers again report a heavier emphasis on teaching: on average 50.3 per cent of their time in terms compared with the average university teachers' 36.7 per cent.

The lesser commitment of polytechnic staff to research might be attributable to their pre-polytechnic traditions and might disguise a convergence in style and outlook among more recent recruits to polytechnics and universities. But this is not the case. There is certainly some evidence that the polytechnic teachers who have come in since 1970 are slightly more research-minded than their more established colleagues. But the gap between them and their counterparts in the universities is much more apparent.

Thus, for example, in answer to the question: "Are you currently engaged on scholarly or research work which you expect to lead to publication?" the affirmative answer from post-1970 recruits was 64 per cent, compared with 60 per cent for the polytechnic sample as a whole. However, the university post-1970 recruits returned 95 per cent and the university sample as a whole 93 per cent.

These contrasts in style of professional behaviour suggest, whether or not they are exactly reflected in institutional separation, there might be a binary division between those whose interest is in the advancement of a subject and those whose preoccupation is with the art or skill to others. There is perhaps a division between researchers and teachers. But the assertion has only to be made to be rejected by anyone with experience of higher education. These two dimensions of science and scholarship, its development and its transmission, do not divide persons. What they have clearly done in this case is to distinguish the emphasis of two types of institution so that the universities have the greater share of highly qualified and productive research, while the polytechnic staff have the greater share of teaching. Again history generated the institutional difference. But self-selection may then perpetuate it and perhaps accentuate it.

The survey data supports such a view. When asked which of four things are most important to its own subject, reputation among colleagues and respect of students are 53 per cent of the university staff chose the subject compared with less than 30 per cent of the polytechnic staff (whose most

important first choice, at 40 per cent, was the respect of their students). More than half of the university teachers specified a leaning of their interests towards research rather than their teaching compared with less than a fifth of the polytechnic teachers. There was more agreement among both university teachers and polytechnic teachers that "an active research interest is essential if a person is to be a good university teacher" than a good polytechnic teacher at degree level.

Widespread satisfaction with the academic career in both sectors

When asked what proportion of his or her time he or she would ideally spend on research, the average university teacher answered 50 per cent and the average polytechnic teacher 29 per cent. (We noted earlier that the actual proportions were 40 per cent and 18 per cent respectively.) The difference of research and teaching orientation is deeply entrenched in the two sectors.

But even so too much must not be made of it. The variance is great within as well as between the two sectors of higher education. Moreover, there are more similarities than differences in attitude to various other facets of the internal life of a college or university. For example, the range of opinion about student capacity, discipline (Table 4) and participation in the governance of higher education is much the same among university and polytechnic teachers. Both heavily reject any kind of formal student part in staff appointments and a firm majority of both reject the idea of basing promotion in part on formal student evaluation of their teachers (Table 4). There is a slight tendency for the polytechnic teachers to look with greater favour on student participation in the defining of student admission policy and the type and content of courses and in determining institutional procedures and standards. But support for such changes is confined to small minorities in both sectors.

What kind of map of academic does this survey evidence denote as the collective view of university and polytechnic teachers? We have already stressed the extra emphasis on research which is typically to be found in the universities. It is congruent with this pattern that when asked to evaluate their own department in relation to its equivalent in other universities (polytechnics) the university staff tend to see their departmental strength in research and the polytechnic staff to do so in undergraduate teaching.

Otherwise the story is again of

widespread satisfaction with the academic career in both sectors. Admittedly 61 per cent of university teachers and 72 per cent of polytechnic teachers agree that there is a pool of mediocrity among their colleagues consisting of people who were appointed in the 60s, given tenure as a formality, and now blocking the promotion of younger and more able people. Nevertheless, over three-quarters of both the university and the polytechnic teachers would change neither their profession nor their discipline if they had the opportunity to start anew.

There is some serious dissatisfaction in the polytechnics about the structure of the career: two-thirds think that the principal lecturership ought to be part of the normal expectation of an academic career and that a special attainment award for minority (fewer than quarter of university teachers take the same view of the professorship). However, over three-quarters are happy with their present post, nearly half thinking of academics as curing more about the respect of their colleagues than about salary differentials. Nearly half of the university teachers and more than half of the polytechnic teachers agree that "being among the better paid members of the community they should moderate their demands for higher salaries." These are impressively modest attitudes by contemporary standards and they are largely shared across the two sectors.

Yet the map is divided, not into distinct but equal territories, but rather into two strata of prestige and attractiveness. The appreciation of hierarchy can be seen from our data on ranking of departments, first definitions of career success, and the patterns of choice in response to opportunities of shifting between universities and polytechnics. When asked to name the three best departments in the respondents' own subject in Britain, both sides of the divide are unanimous in their university departments from both university and polytechnic teachers. In the minds of university teachers the hierarchy runs from Oxford and Cambridge through the most famous London universities, L.S.E., U.C.L., and Manchester and Edinburgh. No other university department, and no polytechnic at all, gained as much as two per cent of first votes. Oxford and Cambridge attracted 36 per cent of the first university votes, London 18 per cent, and Manchester 3.5 per cent. From the polytechnic voters London got most acclaim with 24 per cent, Oxford and Cambridge second with 16 per cent and Manchester third with 4 per cent.

Similarly, when asked what post he/she would regard as the highest achievement in his/her profession, the university claimed the overwhelmingly preponderant share of choices from both university and

polytechnic staff. Almost no university teacher named a polytechnic post, and the university Chair, especially at Oxford and Cambridge, was the majority choice. Among the polytechnic staff nearly half named a university post, usually a Chair, and fewer than one third named a lecturership, departmental headship or directorship in a polytechnic.

No basis for the division between the functions

Moreover, attitudes to shifting across the binary divide are also markedly asymmetric. If offered the opportunity, three-quarters of the polytechnic staff would take it seriously at the same salary, and as many as 47 per cent at a lower salary; but only 7 per cent actually see themselves as teaching in a university in five years' time. By contrast, over half of the university teachers would not consider going to a polytechnic even at a higher salary.

What then would be the solution to the binary problem if decisions were to be based on survey opinion? We have already noted that half of the polytechnic and one-third of the university teachers would accord university status to the polytechnics; they would, in other words, opt for a unitary solution. But in yet other words this means that a two-thirds majority in the universities and half of the staff of the polytechnics would reject this outcome. Underlying this pattern of opinion there are sharp differences of attitude between the senior common rooms of the universities and the polytechnics.

What is agreed by three-quarters of our respondents and on both sides of the divide is that there should be equal non-academic provision, for example, residential accommodation, in both types of institution. It is also agreed by heavy majorities on both sides that a division of function in which the universities retained themselves to the traditional academic subjects, leaving the newer and more vocational subjects to the polytechnics is not a desirable arrangement. But beyond that point the majorities radically disagree. A majority of the polytechnic teachers want a common salary scale, while a majority of the university teachers do not.

A majority of the university staff would want to be given to the higher qualifications and the higher quality and greater quantity of research of university teachers, while a majority of the polytechnic teachers reject this notion. Similarly, a majority of the polytechnic staff, though a bare one, would want

to give weight to the heavier teaching loads of polytechnic teachers, while a majority of the university teachers would oppose such an arrangement. A majority on the university side want better staff-student ratio in universities than in polytechnics, and this is heavily rejected by the polytechnic staff. Again, similarly, while the polytechnics want equal academic provision, for example, of libraries and laboratories, a large minority of university teachers would be unwilling to equalise in this respect.

Policy and history have given us a binary system of higher education. It is not, or at least not yet, a separate but equal division of institutions with discernably different functions. Neither existing practices nor the opinions of teachers in higher education offer any basis for any such functional division.

The distinction is different. It is more a separation in higher education of two levels of amenity, quality of staff and concern with the advancement of knowledge. Both universities and polytechnics teach, but the university adds a much more pronounced effort in research and has the equipment, and still more the quality and interest of its staff, to pursue it.

Opinion in the senior common rooms reflects these similarities and differences. The hierarchy is widely acknowledged. Career aspirations and perceptions of prestige clearly favour the university. There would have to be a massive switch of resources, especially resources for research, to shift the widely held preference for a university career. Equalization of salaries has not, and could not, by itself shift the awareness of a more attractive research milieu in the universities.

Naturally enough, most polytechnic teachers want complete equalization of amenity, supporting staff, student ratios, salaries, and career opportunities. University teachers sympathise with respect to non-academic amenities but, equally naturally, they tend to resist the other demands, seeing themselves collectively as engaged in the same enterprise—higher education—but at higher standards. Future research through their higher qualifications and more selective recruitment.

The reality of the binary system, in short, is a blurred division of quality and not a horizontal division of institutional function. The scarcity of resources is unlikely to allow levelling up of the polytechnics to university standards. Leveling down would further threaten the already endangered position of the universities in the international world of science and scholarship. The evidence from survey makes it abundantly clear that Professor Peston is right and that the whole question needs to be thought through again.

How the lecturers answered the survey

Table 1: Are you currently engaged in research work which you expect to lead to publication?

	Univ	Poly
Yes	64	60
No	36	40
Total	100	100

Table 2: How many academic articles have you published?

	Univ	Poly
None	12.3	50.0
1 or 2	43.6	22.5
3 or 4	22.2	12.0
5 or 6	18.9	5.7
7 or 8	3.6	2.4
9 or 10	1.8	0.0
Total	100.0	100.0

Table 3: Do you think that polytechnics should be given university status?

	Univ	Poly
Yes, all polytechnics	29.0	25.3
No	63.9	50.9
Total	100.0	100.0

Table 4: An academic's first loyalty should be to research in his discipline. The teaching of students and the raising of his university (polytechnic) should be seen to this first duty of an academic career.

	Univ	Poly
Promotion in academic life is too dependent on published work and too little on devotion to teaching	1	69.3
Promotion should be based in part on formal student evaluations of their teachers	2	30.7
Students who disrupt the functions of a university or polytechnic should be expelled or suspended	1	31.7
We have now reached the point where pretty well all those school-leavers capable of profiting from higher education have the chance to do so	2	68.3

Table 5: Admission policies should be based in favour of mature students.

	Univ	Poly
Useless research about useless subjects. This is a valid description of much university research	1	46.2
In the social sciences	2	53.8
In the humanities	1	45.5
In the natural and physical sciences	2	54.5
In my own subject	1	38.9
	2	61.1

Table 6: Do you think that polytechnics should be given university status?

	Univ	Poly
Very heavily in research	16.9	4.4
In both but with leaning towards research	35.9	14.6
In both but with leaning towards teaching	24.8	20.7
Very heavily in teaching	17.3	36.7
Total	100.0	100.0

Table 7: Universities should have better staff-student ratios than polytechnics.

	Univ	Poly
Establishing university and polytechnic salary scales, weight should be given to the higher qualifications and the higher quality and greater quantity of research of university teachers	1	74.8
In establishing university and polytechnic salary scales, weight should be given to the heavier teaching loads of polytechnic teachers	2	25.2
There should be a common salary scale for university and polytechnic teachers	1	39.6
There should be equal academic provision (e.g. libraries and laboratories) in polytechnics and universities	2	60.4
There should be equal non-academic provision (e.g. residential accommodation) in polytechnics and universities	1	41.7
Degree-level work in the polytechnics is rarely of the same standard as that in the universities	2	58.3

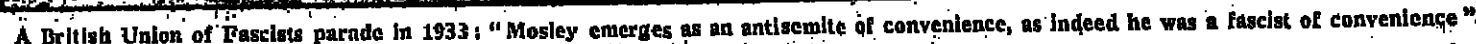
Table 8: What post would you regard as the highest achievement in your profession?

	Univ	Poly
Chair/Professor at Oxford	1	61.5
Chair/Professor at London	2	38.5
Chair/Professor at other University	1	15.9
Chair (at specified university not in the above three)	2	84.1
Any combination of the above	1	74.8
Principal, Reader, Vice-Chancellor	2	25.2
Director of Research Institute	1	39.6
Professional Post in Private Sector	2	60.4
Honorary position, e.g. Fellow of Royal Society	1	41.7
Director of Department (Polytechnic)	2	58.3
Principal Lecturer (Polytechnic)	1	39.6
Reader/Senior Lecturer (University)	2	60.4
Senior Lecturer (Polytechnic)	1	41.7
Other University Post	2	58.3
My own post	1	39.6
Total	2	60.4

BOOKS

from preceding page

Why was it a famous child-
sacrifice? I have questioned you, that
there was no anti-Semitism
involved. As this charge of anti-Semitism
was not proven, several answers
first, that anti-Semitism, like
pedophile and women, was a
thing that existed among all right
thinking men before 1945 that



Here Colin Holmes, a Sheffield lecturer who, though writing of conflict situations when he means conflicts, has certainly made this field his own, goes straight to the heart of the matter. He has discovered a considerable body of anti-Jewish literature, notable chiefly for the fact that its authors were unknown and that it had no serious influence even at the time. The "traditions" which he traces back to the source did not, it comes as a surprise that one writer argued that Jews caused business, another that Shafted MP that they spread filth and a third linked them with "traditions." There is a morbid presentness about this literature, which points to the baneful and noisy Jew (Léviçus), what Jewish involvement in the white slave trade (which was acknowledged by Jews) or how some could marry and with Jewish completely in white associations.

The book is written so well that Sir Richard Burton turned his name to alleged, less than, murder.

Dr Lebelster differs from Dr Holmes in confining herself to the inter-war period, but otherwise goes over much the same ground and from such a much different angle. Her account of detail is excellent. It pleases to learn of one comrade shouting to another at the 1940 Labour party conference, "Sit down you bloody Yids—get back to your seats!" The author's political and literary candidate who stood on the programme of the "destruction of Jewish policies and methods". The author is also informative on the extent to which individual writers were involved in the London area. What makes one groan is her loyalty to the typical Politics Department view of what politics is about. If not seeing the wood for the trees, she does see the forest. One of the most insignificant named group essentially because it has a name, touches the springs of history, the subject of Politics is indeed on the right road. In MacLeod, and in many other places, she suggests thoughts by some unfortunate academic who called to discuss a High Land constituency squabble over salmon fishing. Dr Lebelster does not think that there are any anti-Semitic groups in the British (maximum membership apparently 60). Lessie's Imperial Racial League, and Mosley's British Union of Fascists, Lessie is certainly a little thick on. She is a little too anti-semitic, but his following was minuscule. He is chiefly significant as showing what Money was like. Otherwise, he can only say that the Jews were responsible for the extensive studies even if they had authority on camel hair.

In Brodianin. For such loyalty to the Jewish cause they were rewarded with a "Mammonism" near to the Jewish Philistinism of prewar London is there was interesting, as it was also much more numerous, than what it attacked.

Happy the country, one may well think, which has only one paranoid enemy, and one who still attacks Burton and only perhaps half a dozen committed antisemitic writers over half a century or rapidly increasing Jewish visibility in one of the leading Jew-haters, in chief, the P. M. Harnack, and the white hope of Irish Catholic nationalism in Farnells' younger days. When one thinks, too, of *The Times* paying large sums to Lord Alfred Douglas being put aside for antisemitic luvings; it is clear, that the insignificance and weakness of unofficial prejudice can hardly be magnified. Even because they were Jews was taboo to Conservatives particularly b- the of the Dreyfus case. Liberals more of course of th Russian pogroms.

It is true, however, that dabbling in anti-immigrant politics had to refer to "Jews," to attack German Jews as apes, or Russian Jews as abjects of conscription. Antisemitism of th sentimental, sentimental variety, w antisemitism, which was hostile to Jew on other grounds, was very mu- Namer was excluded from the Balliol fellowship because he was young. Balliol was chiefly made up by the cream of English youth (it

Jews lost more money of glass and silver than any other immigrants. There was a man's Kristallnacht in 1938, over 100,000 Jews were deported. There was riots against Jewish shops in Cardiff, Wales in 1911. London, immigrant centre, was surprised quiet until Mosley's (Mus) called them the cause of the depression. As the contrary, the heavy-weight championship has been banned in 1911 for fear a Jew might beat a white, inflammatory consequence. The Jews simply apathetic on question of Jews.

The only redeeming feature, the Limekiln pogrom of 1904-5, by a Redemptorist priest, permanently expelled two of the Jews from the country. The Jew-making sermons effort stop it. Coming only 10 years after the last reported witchburning in the area, this was a last instance of the mental attitude of the Catholic society.

If anything in modern British history has now been studied as the evidence permits, it is the history of the fascist groups between the wars. But only 90 per cent of the population consisted of the groups. But of traditional, progressive, catholic, and trade unionist. Dr Lebzelter cites the Dispatch of 1932 to the effect that "nine tenths of the population of the British Isles are not Jews"; they are, they are told he "Jew" a view given local prominence when Lord Carnarvon made damages for being wronged. Straws in the wind are continued on facing page.

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Word Headings in Philosophy

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BOOKS

Nature and nurture

Beast and Man: the roots of human Nature
by Mary Midgley
Harvester Press, £7.50
ISBN 0 85527 923 0

The advent of a series of books on sociobiology (the study of human behaviour in a comparative zoological context) has once again led to general mobilization of two opposing schools and to a form of scholarly trench warfare. Although some of the intellectual weapons are new, such as the application of the selection theory to explain the evolution of altruistic behaviour, the disputed frontier is one which was clearly mapped in the nineteenth century. The current debate is more than a refurbished, retold version of the age-old nature/nurture controversy as seen in the Darwinian framework of natural selection.

On the two sides of the frontier zone are the entrenched positions of biologists opposing social scientists. The former are assaulted, with some justification, for "educationalism": the latter are attacked, with equal justification, for resorting to extreme concepts (such as the *tabula rasa* notion of behavioural development in the human infant) in their frantic attempts to exclude the one of the freshest and most useful contributions to appear for some time should come from an entirely different quarter. Mary Midgley, a

Given this state of affairs, it is perhaps not really surprising that one of the freshest and most useful contributions to appear for some time should come from an entirely different quarter. Mary Midgley, a

moral philosopher by training, has provided in *Beast and Man* (her first book) an elegant, penetrating and thought-provoking text which blows away much of the acid smoke hanging over the familiar battlefield. With admirable clarity (all the more necessary and praiseworthy in view of the complex philosophical arguments involved), she sweeps away much of the debris created by partisan encounters and neatly identifies the really important issues. With relentless application of logic, and exclusion of superfluous jargon, she demonstrates that many past statements in this area have been "vacuous" or "idle" (two of her favourite, but appropriate, adjectives). In the process, it emerges quite clearly that a philosophical approach based on the intuitive view of human biology and culture is not only intellectually respectable but absolutely essential to any proper analysis of human nature. Significantly, Mary Midgley achieves this feat without resorting to reductionism. She makes it obvious that biological processes are an indivisible part of the dignity of man and not in any way opposed to it. Too often in the past, man has been defined in opposition to nature, not as part of nature, and this has had far-reaching and sometimes disastrous results.

Any home can be made uninhabitable. Our culture has too often talked in terms of conquering nature. This is about as sensible as for a caddis worm to suggest it is, or drunk to start flailing the bed he is lying on. Our dignity arises within nature, not against it. (page 196)

Quite apart from introducing a much-needed clarification of the issues in the nature/nurture debate, Mary Midgley has shown that moral philosophy is extremely relevant to the entire subject. Incidentally, she has also shown that complex philosophical issues of central importance to scientists can be presented in a straightforward

and entertaining way without losing a scrap of their value: a formidable achievement indeed.

By and large, *Beast and Man* reflects a detailed understanding of the biological arguments—something which is sadly lacking in many otherwise stimulating contributions from social scientists anxious to keep biology in its place. There is unfortunately one flaw, though, which will doubtless be gleefully singled out by social biological critics. In several places Mary Midgley refers to natural selection as promoting survival of the species. Of course, natural selection operates by favouring individuals within a species population; survival of species is an indirect result of selection ensuring that members of the population are individually adapted to the environment. Since genetic arguments used by sociobiologists (such as Wilson) refer in detail to the balance of selective forces acting upon individuals and upon their close relatives (kin selection), it is confusing to write in terms of survival of the species, as opposed to the spread of individual genes through the population. In fact, this flaw does not detract from the book, but it does indicate that the author has not completely grasped the genetic issues involved in sociobiological arguments.

This minor criticism apart, I have nothing but praise for *Beast and Man*. It is beautifully written, stimulating and original. *Beast and Man* should be read by all those directly concerned in the nature/nurture debate: zoologists, anthropologists and social scientists. In thinking person can afford to be without a philosophical outlook which integrates biology of culture. Accordingly, this is a book which deserves to be read across all disciplinary boundaries: I say it will be.

R. D. Martin

We all fall down

Epidemic Disease in Fifteenth-Century England: the medical response and the demographic consequences
by Robert S. Gottfried
Leicester University Press, £10.00
ISBN 0 7185 1166 2

Famine in Tudor and Stuart England
by Andrew B. Appleby
Liverpool University Press, £10.75
ISBN 0 85323 014 5

Publications on famine and disease are assuming the proportions of an epidemic. These two books are excellent examples of the genre, illustrating both the strengths and weaknesses of such studies.

Gottfried's is particularly welcome because it focuses on the fifteenth century, a demographic dark age, and uses a methodology of great interest. It must be admitted, however, that the methodology has its drawbacks. The author has computer-analysed 15,000 wills drawn from ecclesiastical sources in East Anglia, using the statistical package for the social sciences. That package, as every user knows, produces large quantities of unpalatable computer print-out, huge chunks of which are here served up, almost raw, on 40 pages of tables. The accompanying discussion appears in places also to have been written by the computer, and makes for heavy reading.

Lacking parish registers and similar sources, historians have generally assumed that little can be discovered about the process of demographic decline in the fifteenth century. But Gottfried, following Sylvia Thrupp, demonstrates that valuable demographic information can be extracted from wills and related testamentary material. At the simplest level, their annual and seasonal clusterings reveal peaks of mortality and provide clues to which diseases were responsible. During the years 1460-1470, three major periods of mortality stand out: the mid and late 1460s, the mid-1460s, and virtually the whole of the 1470s. The dominant demographic fact was the presence of epidemic disease, of which

plague was the most important, not only in the early years but also late. And famine and famine-related diseases were, by contrast, unimportant causes of death.

Gottfried also uses wills to estimate the frequency and age of marriage and replacement ratios. His discussion of these issues is sensible and convincing. All serious students of late medieval England will be indebted to the author for his demonstration of the value of a hitherto neglected source for demographic history.

When we turn to the sixteenth century we find two things not present in the fifteenth: parish registers and—if Dr Appleby is correct—famine. Appleby sets out to establish a method of identifying areas of famine, using parish registers and evidence contained in parish registers; and to demonstrate that famines occurred in Tudor and Stuart England, despite a common belief to the contrary. He succeeds in both objectives, although his study concentrates on only three families, in 1587-88, 1597, and 1623, in two unrepresentative counties, Cumberland and Westmorland.

Appleby's scheme for pinpointing starvation is more sensitive than Peter Laslett's in *The World We Have Lost*. It depends on the investigation of the regional and seasonal patterns of unusually high mortality. If an abnormal number of burials is found in one parish only, the presence of a localized epidemic may be suspected; if the deaths take place mainly in the summer months, then the cause may be plague or dysentery. Deaths from starvation, on the other hand, are likely to occur simultaneously in several parishes, and to happen more in the winter and spring months. Through the seasons should the harvest fail in successive years.

If, in addition, mortality is high among infants, widows and wanderers, and increased mortality is accompanied by a fall in the number of baptisms, then the picture of starvation is complete. In the picture gradually changes during the seventeenth century. Rural depopulation, partly caused by the earlier famines, and partly by the pressure on land, led to a fall in the number of baptisms and a fall in the number of burials. The local economy was becoming more diversified, and the number of wanderers was falling. The picture of starvation is complete. In the picture gradually changes during the seventeenth century. Rural depopulation, partly caused by the earlier famines, and partly by the pressure on land, led to a fall in the number of baptisms and a fall in the number of burials. The local economy was becoming more diversified, and the number of wanderers was falling. The picture of starvation is complete.

high at the relevant times, as most clinched. Appleby is reasonably sure that people starved in Cumberland and Westmorland in 1597 and 1623, and probably also in 1587-88, although in those years the picture is obscured by the presence of plague. He complicates his case, though, by insisting that starvation was an independent cause of death, distinct from diseases associated with malnutrition. It cannot be seen as a matter of great importance to the victim whether he died because of too few calories or because his ability to combat disease had been weakened by hunger. Modern evidence shows that starvation has occurred in the sixteenth century without an increase in the incidence of epidemic disease is not relevant to the sixteenth century, because in the sixteenth century there existed the knowledge and means of controlling epidemics.

The most interesting part of the book is the account of how starvation, which is what happens to individuals, can turn into famine, which affects society at large. In the later sixteenth century a population of Cumberland and Westmorland grew by more than 50 per cent, leading to a substantial increase in the incidence of famine. The local economy was becoming more diversified, and the number of wanderers was falling. The picture of starvation is complete. In the picture gradually changes during the seventeenth century. Rural depopulation, partly caused by the earlier famines, and partly by the pressure on land, led to a fall in the number of baptisms and a fall in the number of burials. The local economy was becoming more diversified, and the number of wanderers was falling. The picture of starvation is complete.

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R. A. Clark

BOOKS

Rather reassuring history

Death in Paris 1795-1801
by Richard Cobb
Oxford University Press, £4.95
ISBN 0 19 215843 0

Since *The Police and the People* in 1970 which had 324 pages and was as its subtitle promised, actually about "French popular protest", the focus of Professor Cobb's books has become less obvious and the books themselves have become shorter and shorter. *Reactions to the French Revolution and Paris and the Province*, published in 1972 and 1975, run to rather more than 200 pages of text. *A Sense of Place* (1975) reached only 135 and his latest book barely attains three figures, apart from its notes and appendices.

This is not accidental. While his subject matter remains much the same—the more violent aspects of the life of the poor in late eighteenth-century France—Cobb's approach to it becomes steadily more stringent, as he moves farther and farther away from the average history student is likely to regard as information. His people have less and less to do with the business of conventional history; they are scarcely even victims of revolutions, wars or national experience of any kind. His sources become ever more challenging by virtue of their bleak concern only with those aspects of the life—or death—of people, that were of interest to the public authorities.

Death in Paris takes us a further step along this road. Its basis consists of the particular case of persons... who met violent deaths through suicide, accidents, murder, and natural causes" in one part of Paris, between April 1795 and September 1801. The "particulars" in question rarely amount to more than the briefest description of the victim, what they were wearing or carried in their pockets, and of the relatives or neighbours who identified the corpse. Cobb is not interested in a sociological study of suicide, for which the present sample would be inadequate, or in investigating the motives of the unfortunate people concerned, which are lost beyond recall. Even his extraordinary world from a few scraps of evidence can make very little out of this. Why does he do it? Why does he choose of such remarkable gifts, with an unrivalled knowledge of the period, insist on setting himself such increasingly difficult and apparently unrewarding challenges?

The concept of state

The Foundations of Modern Political Thought
volume one: The Renaissance
volume two: The Age of Reform
by Quentin Skinner
Cambridge University Press, £12.50 and £4.95 per volume
ISBN 0 521 22223 8 and 29337 5; 0 521 22284 2 and 29435 5

Quentin Skinner's intention, in this ambitious undertaking, is clearly set out in the preface: to provide an outline account of the principal ideas of late medieval and early modern political thought, to trace the development of the concept of the state, and to seek to identify the great works of political theory in an historical framework. The first objective is far more ambitiously achieved than might be suggested by the modest phrase, "outline account". In fact Professor Skinner gives us a series of moving from works of the Italian Renaissance, through the Calvinist and Lutheran Reformation, to the English Civil War, and the French Revolution, to the birth of the modern state.

The author's third aim, involving the use of the concept of the state, is also achieved. He shows how the concept of the state has been used by the great thinkers of the period, and how it has been used by the great thinkers of the period, and how it has been used by the great thinkers of the period.

and some reservations remain for readers whose approach is less theoretical.

This is particularly the case in regard to Skinner's second aim, that of tracing the development of the concept of the modern idea of the state. Here the author offers a number of preconditions which, he maintains, must be satisfied before it may be said that the foundations of the modern state have been laid: that government should be treated as a practical science rather than a philosophical ideal; that the territory in which this science is to be practised should be independent of all outside powers; that the supreme internal power should be sovereign; and, finally, that the state's power should be secular, not spiritual.

Skinner maintains that by the end of the sixteenth century these preconditions had been met. It is at this point that some doubts may creep in. Indeed the author himself observes in the very first footnote that he would like to suggest that precisely our concept of the state had emerged at this date since, for example, the concept of nation still lay far off. It would be absurd, of course, to suggest that any particular date could be satisfactorily determined. Such an elusive idea and Professor Skinner is far too skilled a navigator in these shifting currents to make such an assertion. Yet one cannot but wonder, whatever reservations are made, whether the late sixteenth century is not a premature moment to call a halt. Professor Skinner remarks, and I would certainly agree, that: "The surest sign that a society

This helps to explain the paradox of his detestation, in the presence of the kind of violence that is more concerned to explain than to condemn in the past. Another form of reassurance for him, as for Wordsworth, is perhaps the ability to demonstrate that in these embers is something that doth live, that nothing which was alive ever quite disappears. This may be why he turns more and more to the recovery of the lives of those whose anonymity seems the most intractable. As he writes in *Death in Paris*, "suicide, even publicly committed, remains the most private and impenetrable of human acts. The historian is unable to interrogate those who went to their death silently, leaving no literature, no testament, indeed, in most cases, leaving scarcely anything at all." Most historians would have found this a very good reason for not trying.

Quite typically, the concluding paragraph of the book turns from the dead to those who identified them. Not only because they went on living, and thus represented the promise of continuity, but because their presence, their hints, their occasionally revealing statements, and their occasional, on open up a world of neighbourliness, of watchfulness, of enforced "living together" which, however crude and brutal, noisy and filthy, quarrelsome and envious, was not devoid of compassion, tenderness, and the powers of the state; reassurance against personal oblivion, perhaps; more certainly, a comforting sense of the fragility of human decency, despite the fragility of individual lives. Something more or less along these lines seems to impel his recent work. Where a Namer might look for reassurance in the contemplation of the stability of aristocratic dynasties at the height of their wealth and power, Cobb draws his comfort from the opposite end of the social spectrum. If civilization—and here he is always more concerned about what gives dignity and meaning to the human condition—is to be maintained, it must be by the people, not by the elite. If civilization in this broad sense could survive when so many of the poor and ignorant had to suffer so much in the past, there is hope for the present. No doubt this is only one aspect of a concern for the past that delights in variety, the unexpected and the relationship between people and their surroundings, but it is a theme to which he constantly recurs, with increasing emphasis.

Norman Hampson

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Cambridge has been appointed to the Chair of Pharmacy at St. George's Hospital Medical School. Walpole, director of the Institute of Medical Research at St. Mary's Hospital, has been appointed to the Chair of the same

Burgh, has been appointed to the chair of dymistry in St Antony's College, University of St Andrews.

Dr John Adair, management consultant and author and lecturer has been appointed to a new chair in leadership studies in the Department of Psychology of the University of Surrey.

Professor D. K. Beynon, professor of electronic engineering at the University of Wales Institute of Science and Technology, Cardiff, has been appointed to the chair of electrical engineering and headship of the department of electronic and electrical engineering of the University of Surrey.

M. P. W. Mallon, reader in management studies, has been appointed to a hotel, catering and tourism department at the University of Surrey, having been promoted to the new chair in hotel and catering.

Professor Horace A. Barker, professor in the department of electrical science and engineering at the University of Aston, has been appointed to the chair of electrical engineering with the headship of the department of electrical science and electronics engineering at the University College of Swansea.

Dr Richard Thomas Shannon, reader in history at the University of Exeter in Anglia, has been invited to take the chair of modern history at the University College of Swansea.

Dr John S. Atwell Davies, senior lecturer in history at the University of Sussex, has been promoted to a professorship.

Dr J. E. Frevezer, honorary lecturer in law, University of London, has been appointed to the chair of law at the University of Sussex.

Dr R. G. von Karmiloff-Smith, senior research fellow in psychology, Sinclair, Université de Genève, has been appointed to the chair of experimental psychology at the University of London from April 1, 1980.

Dr William C. Munn, lecturer in forensic science at the University of Strathclyde, has been promoted professor of forensic science and head of the department of pharmaceutical sciences.

Professor R. K. O'Nions, professor of geological observation at Columbia University, New York, has been appointed to a Royal Society research professorship; his work includes the topics of mineralogy and petrology of the University of Cambridge.

Dr H. Harfenist, of the faculty of engineering, University of Warwick, has been promoted professor and head of the department of electronics and power engineering, succeeding Professor L. M. Musgoller who resigned at the end of last year.

Dc. W. B. Davies, senior lecturer in the Institute of Education, has been

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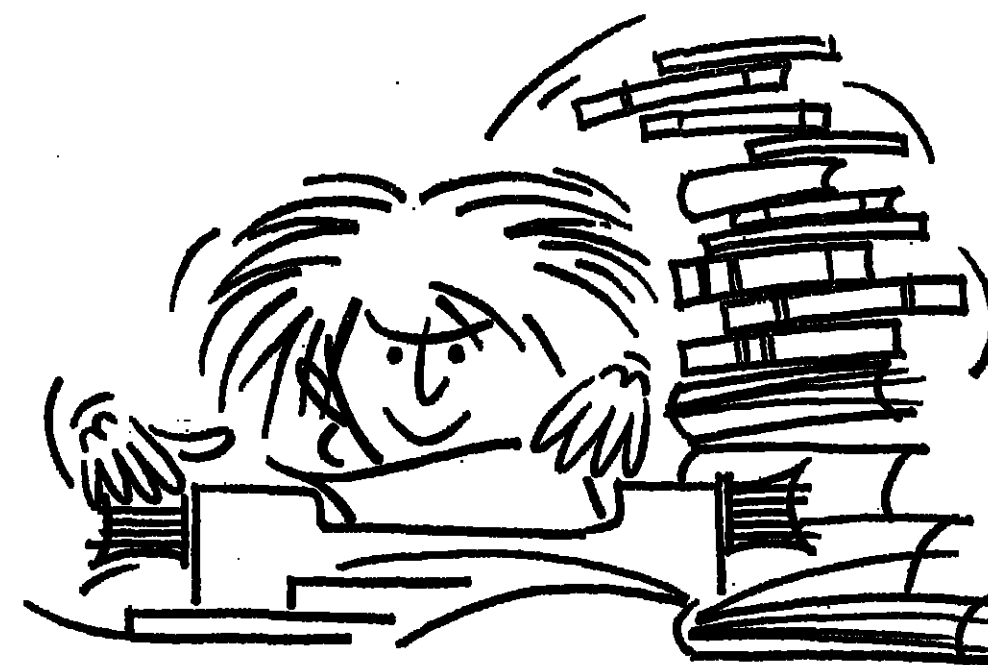
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However, to review authoritatively and at length, takes a while longer.

We will also be starting a major series of surveys of notable books which have appeared during our absence, while leading writers and scholars will be nominating outstanding titles.

It's going to be a particularly stimulating issue, and a return to the standard and quality of reviewing that has made the TLS the world's leading literary review for over 75 years.

In the light of that, we're certain your patience will be amply rewarded.

Returns 23rd Nov.

TLS

THE TIMES LITERARY SUPPLEMENT

Overseas

**HONGKONG
POLYTECHNIC**

The Hong Kong Polytechnic is a large institution of advanced education which offers courses in a wide range of subjects. In addition to three major academic Divisions comprising 20 teaching departments, it also has a number of interdisciplinary institutes and centres. It is now preparing plans emphasizing high level programmes and applied research activity relevant to the needs of Hong Kong. The Polytechnic invites applications for the following posts which are tenable from 1st September, 1980:

Accountancy

Principal Lecturers/Senior Lecturers/Lecturers in Accountancy (at least one of the vacancies will be in the specialization of Cost and Management Accounting).

Applied Science

Senior Lecturers/Lecturers in Chemical Technology, Applied Biology and Physics/Materials Technology.

Building & Surveying

Principal Lecturers in Building Science and Building Surveying.
Principal Lecturers/Senior Lecturers in Building Management.
Principal Lecturers/Senior Lecturers/Lecturers in Building Technology, Building Services and General Practice Surveying.
Senior Lecturers/Lecturers in Quantity Surveying and Land Surveying.

(Corporate memberships of the RICS, IOB, IQS and the CIBS are regarded as degree-equivalent qualifications in the appropriate disciplines.)

Business & Management Studies

Senior Lecturers/Lecturers in Transport Operations, Insurance, Marketing, Economics, Law and Management Studies.

Civil & Structural Engineering

Principal Lecturers/Senior Lecturers/Lecturers in Civil Engineering subjects.

Computing Studies

Principal Lecturers/Senior Lecturers/Lecturers in Computing Studies. (Applicants must have experience in one or more of the following areas: Data Base Management, Design of Real-Time Systems, Computer Aided Design and Graphics, Management Information Systems, Computer Systems Analysis, Systems Programming, Structured COBOL Programming, Computer Applications in Production Control, Inventory Control, Banking and Insurance, Computer Applications in areas relevant to the courses offered at the Polytechnic, including Engineering, Mathematics, Design, Accountancy and Business Studies.)

Design

Principal Lecturers/Senior Lecturers/Lecturers in Product Design, General Design Practice, Drawing and Illustration, Interior Design, Fashion Design, Three-Dimensional Design (Foundation), Far Eastern Art, Advertising Design, Photography, Textile Design and Visual Communications.

Electrical Engineering

Principal Lecturers/Senior Lecturers/Lecturers in Transmission and Distribution of Electrical Energy/Instrumentation and Measurement.
(Principal and Senior Lecturers will be expected to have had experience in administration and course/laboratory development.)

Electronic Engineering

Principal Lecturers/Senior Lecturers/Lecturers in Electronic Engineering in one or more of the following: Integrated Circuit Applications, Computer Hardware and Software, Circuit Theory, Microelectronics, Systems and Control, Instrumentation, Calibration and Communication Engineering.

**Institutional Management
& Catering Studies**

Senior Lecturers/Lecturers in Food Production, Food Service, Technology/Facility Planning, Applied Legal/Economic/Human/Financial aspects.

Languages

Senior Lecturers/Lecturers in German and Japanese.

Mathematical Studies

Principal Lecturers/Senior Lecturers in Mathematics, Statistics or Operations Research.

Mechanical & Marine Engineering

Principal Lecturers/Senior Lecturers/Lecturers in General Mechanical Engineering subjects including Heat and Mass Transfer, Thermodynamics, Fluid Mechanics, Strength of Materials, Control Engineering and Engineering Mechanics.

Nautical Studies

Senior Lecturers in Marine Electronics.
Senior Lecturers/Lecturers in Nautical Studies.

Production & Industrial Engineering

Principal Lecturers/Senior Lecturers/Lecturers in each of the following subjects: Materials Technology, Industrial Management, Analysis of Manufacturing Systems, Production Technology, The Engineer in Society, Work Study, Polymer Engineering, Quality and Reliability, Physical and Mechanical Metallurgy, Production Equipment Design and Work Design.

Industrial Centre

Principal Lecturers/Senior Lecturers/Lecturers in the following training posts: Manufacturing Process Manager (Principal Lecturer/Senior Lecturer level), Industrial Plant and Machine Tool Maintenance (Senior Lecturer/Lecturer level).

Institute of Medical & Health Care

Principal Lecturers in Co-ordination of Studies and Occupational Therapy.
Senior Lecturers in Dental Technology, Occupational Therapy, Radiography, Optics and Medical Laboratory Sciences (Blood Group Serology).
Lecturers in Occupational Therapy, Radiography, Optics, Medical Laboratory Sciences (Blood Group Serology) and Physiotherapy.

Institute of Textiles & Clothing

Principal Lecturers/Senior Lecturers in Woven Fabric Manufacture and Knitting Technology.
Senior Lecturers/Lecturers in Clothing Design and Clothing Technology/Production.

School of Social Work

Senior Lecturers/Lecturers in Psychology (Child Care), Sociology or Social Work (Practical Training).
(Candidates should be familiar with the Hong Kong scene in their particular specialties, preferably through actual experience in the field. Fluency in written Chinese and spoken Cantonese will also be required.)

**General Qualifications for
Appointment**

Principal Lecturer: (a) a degree or professional qualification; and (b) an advanced specialist qualification or extensive experience in a specialized field; and (c) substantial teaching and industrial/commercial experience; and (d) proven administrative ability.

Senior Lecturer: (a) a degree or professional qualification, plus preferably an advanced specialist qualification; and (b) at least five years professional experience; and (c) substantial teaching and/or industrial/commercial experience (about 3 additional years); and (d) proven administrative ability.

Lecturer: (a) a degree or professional qualifications or at least a Higher Technological qualification in the appropriate field of study; and (b) at least five years professional or industrial/commercial experience or at least three years teaching experience or a suitable combination of professional and teaching experience.

Salary Scales

Principal Lecturer: HK\$105,000 to HK\$129,600 p.a. by five increments.
Senior Lecturer: HK\$85,620 to HK\$114,840 p.a. by six increments.
Lecturer: HK\$47,480 to HK\$65,140 p.a. by eleven increments.
Notes: 1. All figures HK\$10,000 on 8th November, 1979. (The exchange rate is subject to fluctuation.)

Conditions of Service

Appointment will be on two-year gratuity-bearing contract terms. Initially, thereafter suitable appointments may be offered further contracts or superannuable terms of service at the discretion of the Polytechnic. Benefits include long leave, free passages, subsidized accommodation, medical and dental treatment, children's education allowance, and a terminal gratuity equal to 25% of basic salary received over entire contract period. Application forms and further information are obtainable from: the Hong Kong Government, London Office, 6 Grafton Street, London W1X 3LB, United Kingdom. Completed application forms should be returned to the same office by 8th December, 1979.

Applicants should indicate in their letter the post they are applying for, or the specialization they can teach.

"No, actually," said Allison, fensive and upset again. "It's that I thought I perhaps I was to perhaps come and tell you I've just accidentally backed Rover 3500 over your Rhinoceros again. Sorry and all that."

The new Education Bill is another vehicle for the Government's cutback programme. The

It is still the received wisdom that members of Parliament whom 11 per cent of the voters regard as the least offensive of the class. Yet, to understand their scope as students are not particularly popular anywhere. In the Labour Party, for example, both the NUS and the vice-chancellors, it will inevitably be some years before their truly significant impact emerge. They are neither as high profile as the Conservative Party's overseas service of the BBC, nor immediate as electoral "one school transport for large families". Yet in many ways they promise to have a more lasting effect than

Although the absolute number of students may not have diminished, all the admissions officers are

math

These are, as yet, only suggestions—since the detailed proposals will not be available for some weeks.

Not are guarantees to students on course, very impressive. Many are in college, qualifying for higher education. They are already on very tight budgets and any chance of progressing further is now dim. The crippling financial burdens will force many of them to take jobs and become illegal overstayers—living in fear of a visit from the police. The seeds of racism will only come to fruit slowly, but there are there none the less—and if they are still somewhat lost on the they are certainly not on the students potentially affected.

also considering whether arrangements outlined above be modified to take account of position of students from member countries of the ERCC.

whether it takes the form of delayed or frozen appointments or

One of the pleasant little privileges given to a Member of Parliament is to stand at the bar of the House of Lords and watch the English Establishment at work. The Lords are not always particularly good at it, but the suggestion of a textbook role of checking and advising governments. (They are not half so good as *The Times* correspondents columns—one reason, I suspect, for Mrs T. being able to go away with so much over the goods.)

Lord Goodman, who has been six weeks in the job, was in operation last Monday in the debate on the "Prevention of Any Menace to Our Security Services Bill" with a collector's place.

Lord Goodman, seemingly in his capacity as ex-chairman of the

NATHE and the NUS will be the "Union View" series. In his very own perspective on letters intended for publication.

It is going to be a long, hard, often bitter fight—but it has to be won.

The author is Assistant Sec
(Higher Education) of NATF

The author is Labour
Lewisham West

NATFHE, and the NUS will also contribute regular columns to the "Union View" series. Laurie Taylor will continue his very own perspective on the by-ways of academic life. Letters intended for publication should arrive by Tuesday.

for the carefree expansion of educational opportunity and through this advance to a more civilized and intelligent society are revived and fuelled by the revenue from North Sea oil and untapped demand from adult women and unskilled men.

more relevant and more popular form of higher education, and by the Open University for a new day.

As a result, all public services seem to have lost faith in them.

afraid to question the need for cuts

But this should not simply be motivated by self-interest. The one quality above all which a society

back the State by cutting public expenditure. It has already demonstrated its determination. But although the Government may have a right to impose cuts, it also has a duty to impose them in a rational and equitable way, and universities

stop there. There is simply no guarantee that universities will be able to replace their lost grants with fee income. The consequences could well be lower standards of education for home students (but

The third area of concern is the sudden loss of an already inado-

higher education and the fate of the binary policy cannot simply be put on ice for five years. Above all, the attempt to provide not just a system by a style of higher education that is appropriate for the twenty-first century cannot be abandoned.

and others of money came in with astonishing speed. Almost exactly a year from that first telephone call we had £500,000, spread over five years, towards basic running costs.

There is no formal reason why a local authority should not give

to join an orchestra now, as salaried members. But they have responded to the opportunity—and this is their *raison d'être* of the course—to gain enhanced professionalism and a wider background to their chosen profession.

style, a positive commitment to greater flexibility, so that this practice becomes—though still no doubt the choice of a minority (and student choice is essential)—more frequent than at present and sur-

At any rate, the essence of the scheme is clear: commencing of the

Major policy changes are not likely in the next few years. All test proposals (such as this) will be written off by some people as "cosmetic." But cosmetics can

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